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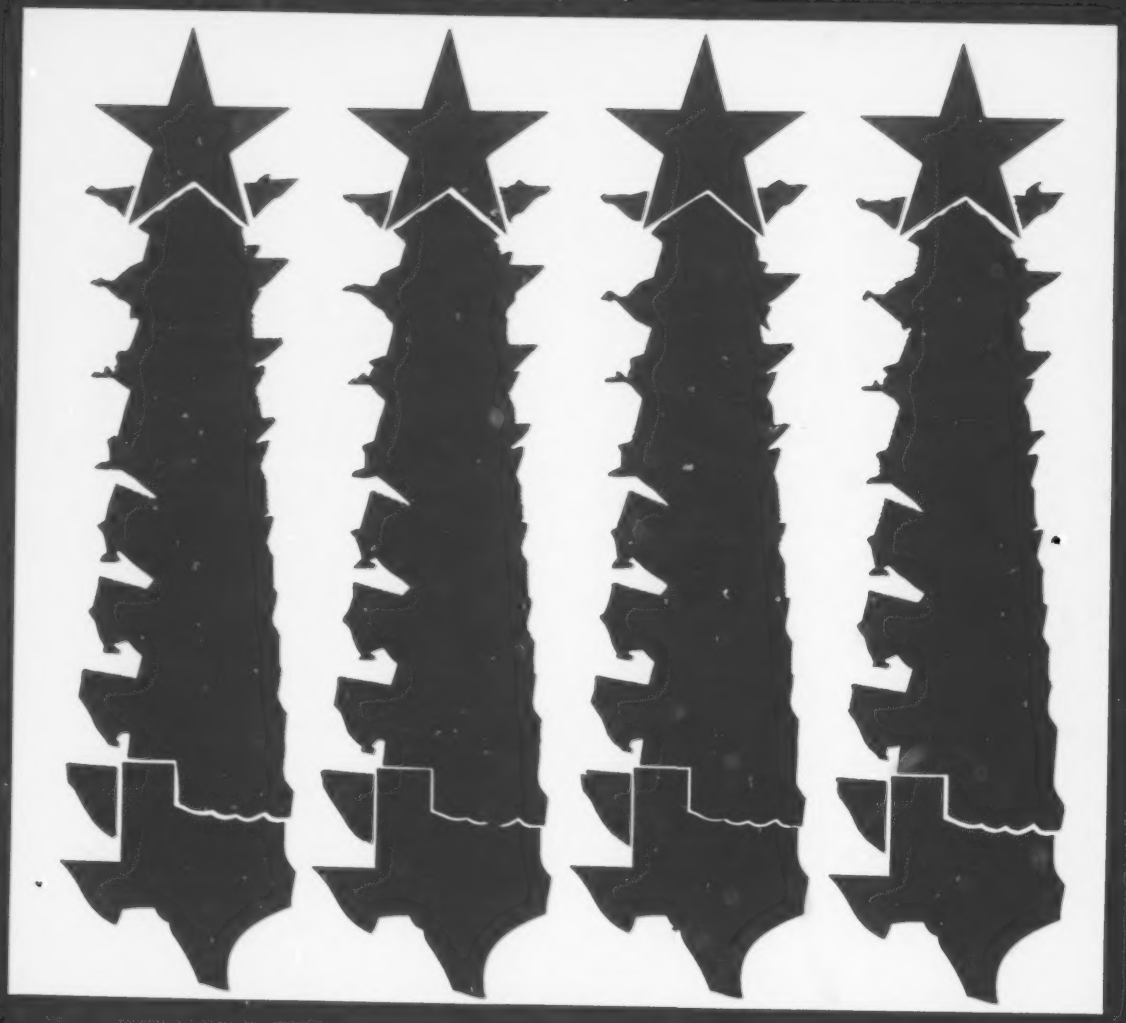
ABSTRACT

This report presents information for school years 1988-89 and 1989-90 on progress under and compliance with the Texas Master Plan for Vocational and Technical Education. It also reports on quantitative and qualitative evaluation of the state's vocational programs. Section I provides information on elementary and secondary education. It sets forth the goals and selected objectives in the plan and specific career development strategies developed to achieve these goals and objectives. The actions taken are described for these eight goals: (1) student performance; (2) curriculum; (3) teachers and teaching; (4) organization and management; (5) finance; (6) parent and community involvement; (7) innovation; and (8) communications. Results of the following major evaluation activities are reported: onsite compliance monitoring, civil rights evaluations, sunset program reviews, and program completer evaluations. Section II provides information on higher education. It sets forth the goals and strategies developed to achieve them. The actions taken are described for these six goals: state communications, employer needs, student needs, faculty and staff needs, community needs, and adequate resources. Results of the following major evaluation activities are reported: site-visit evaluations, sunset review, onsite compliance monitoring, civil rights evaluation, and program completer/employer assessment. Section III presents information on regional planning activities to achieve an integrated delivery system. It focuses on the Quality Work Force Planning model that has been piloted. Appendices depict the Quality Work Force Planning Regions and the planning model. (YLB)



BIENNIAL REPORT OF PROGRESS UNDER AND COMPLIANCE WITH THE MASTER PLAN FOR VOCATIONAL AND TECHNICAL EDUCATION AND AN EVALUATION OF VOCATIONAL EDUCATION PROGRAMS

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BIENNIAL REPORT OF PROGRESS UNDER AND COMPLIANCE WITH THE MASTER PLAN FOR VOCATIONAL AND TECHNICAL EDUCATION AND AN EVALUATION OF VOCATIONAL EDUCATION PROGRAMS

From the State Board of Education

Submitted to the Governor, Lieutenant Governor, And the Seventy-Second Texas Legislature

1989-1990

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April 1991

The Honorable Ann W. Richards, Governor of Texas
The Honorable Bob Bullock, Lieutenant Governor of Texas
The Honorable Gibson D. Lewis, Speaker of the House
Members of the 72nd Legislature
Texas Council on Vocational Education

Enclosed is the State Board of Education biennial report required under provisions of Texas Education Code Section 21.113(g) related to the Master Plan for Vocational and Technical Education. The board is required to report biennially the progress under and compliance with the Master Plan for Vocational and Technical Education and to evaluate quantitatively and qualitatively the state's vocational programs. This report presents information for school years 1988-89 and 1989-90.

The board adopted the Master Plan on January 10, 1987, with the intent that significant changes must be made in vocational and applied technology education if it is to contribute to the transformation of the Texas economy. The plan anticipated a transition period with full implementation scheduled for the 1989-90 school year. Since then the board has adopted and subsequently updated a list of priority occupations, used available federal vocational education funds for research and development activities designed to assist with the implementation of the plan, and adopted updated rules for curriculum.

Full implementation of the major initiatives of the plan has been achieved. As the plan continues to be updated over the next several years, vocational and applied technology education will assist Texas in meeting the challenges of the 21st century.

Respectfully submitted,

Carolyn Honea Crawford

Carolyn Honea Crawford, Chairman
State Board of Education

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INTRODUCTION

The purpose of this State Board of Education biennial report, required under the provisions of Texas Education Code Section 21.113(g) related to the master plan for vocational and technical education, is twofold. First, this report presents information regarding progress under and compliance with the master plan for vocational and technical education during school years 1988-89 and 1989-90. Second, this report presents quantitative and qualitative evaluative information on vocational education programs conducted during those years.

The document is comprised of three major sections. First, the document presents information for elementary and secondary education that was prepared by staff from the Texas Education Agency. Second, the document presents information for postsecondary technical, vocational, and adult education that was prepared by staff from the Texas Higher Education Coordinating Board. Third, the document presents information on regional planning activities that was prepared by staff from both agencies. All three sections present information regarding progress under and compliance with the master plan. The first two sections also present quantitative and qualitative evaluative information on secondary and postsecondary vocational and technical education programs.

The State Board mission for public education calls for all students to receive an education that will enable them to live and work in a changing future. To fulfill this mission, the master plan emphasizes the need for strong academic foundations for all students, awareness of a broad range of career opportunities, and occupationally relevant education appropriate for the Texas economy of the 21st century. At the postsecondary level, the master plan is designed to meet the employment needs of the state for a skilled and educated work force. The broad spectrum of student interests, abilities, and needs are to be met, while fulfilling the short- and long-range employment demands of the public and private sector.

Section 21.113 of the Texas Education Code specifies the requirements for the master plan for vocational and technical education. The master plan must set forth objectives for vocational and technical education for the next school year and long-term goals for the following five years. It must also include provisions for delivering vocational programs through public school districts and public postsecondary institutions and support of those programs by private employers and proprietary schools. The vocational programs must be designed to meet the needs of new and emerging occupations listed on the State Board of Education list of priority occupations and to meet the needs of special population groups such as handicapped persons, disadvantaged persons, and adults. The master plan must include procedures designed to ensure that: (1) all secondary and postsecondary students in Texas have the opportunity to participate in vocational education programs; (2) the state complies with requirements for supplemental federal vocational education funding; and (3) vocational education is established as a part of the total education system of the State of Texas.

The master plan is the blueprint for restructuring vocational education in Texas. Eight basic principles form the foundation of the master plan.

1. Education must prepare students for productive lives in the changing Texas economy.

2. Preparing all students to work in the changing national economy requires that academic foundations receive top priority.

3. If all students are to be prepared, the gulf between academic and vocational education must be bridged.

4. The curriculum must be flexible.

5. The curriculum must be adaptable to students with special needs.

6. The system for developing career opportunities must be accountable.

7. The career development needs of undereducated Texas adults must be addressed.

8. Funding must drive needed changes in vocational education.

Under the master plan, vocational and technical education is becoming a dynamic component of an educational system characterized by quality, equity, and accountability.

The Governor's Task Force on Vocational Education in January 1988 strongly endorsed the master plan as a comprehensive and well-conceived plan to upgrade and improve vocational education in Texas. The task force noted that the plan provides a clear sense of direction to make major improvements in vocational education that will benefit Texas' economic future.

SECTION I
ELEMENTARY AND SECONDARY EDUCATION

PROGRESS UNDER AND COMPLIANCE WITH THE MASTER PLAN

The master plan for elementary and secondary education sets forth the goals and selected objectives found in the long-range plan for Texas public school education. Specific career development strategies were developed to achieve these goals and objectives.

GOAL 1: STUDENT PERFORMANCE— **All students will be expected to meet or exceed educational performance standards.**

The state must hold high expectations for the educational performance of its students and must provide incentives, assistance and other strategies to help schools help students meet these expectations. The educational performance of Texas students must continue to improve, not only according to state indicators, but also relative to the nation as a whole. This improvement must apply to all of the students in the state regardless of economic status, ethnicity, or race. Five career development strategies address this goal.

Career Development Strategy 1-A:
Develop and implement a comprehensive plan for student evaluation.

- The student information section of the TEAMS test form collects data regarding current or past participation in vocational education courses. This information may be used at the local level to assist in evaluating the academic performance of students taking vocational education courses to satisfy elective course requirements.
- Employers of vocational education program completers were asked to evaluate the technical knowledge, work attitude, work quality, and relative preparation of the vocational education program completers. In 1988-89, 11,691 employers responded with an overall rating of 4.45 on a 5 point scale. In 1989-90, 10,941 employers responded with an overall rating of 4.44 on a 5 point scale.

Career Development Strategy 1-B:
Develop vocational education programs that assist in closing the achievement gap between educationally disadvantaged students and other populations and that assist in reducing the dropout rate.

- The State Board approved funding for a project identified for the development of model school programs and curriculum for parenting skills for school-age parents.
- The State Board at its October 1989 meeting adopted rules contained in (19 TAC 75.217(j)) that approve instruction of an additional course called Basic Vocational Education (BVE). BVE is designed to serve students at risk of dropping out of school and those placed through the Admission Review and Dismissal (ARD) Committee. The essential elements for this course address occupational investigation, integration of academics and vocational education and remediation of academics in preparation of students prior to entry into other vocational education courses.
- Texas Education Agency staff participated in the planning and implementation of the 1990 Center for Slower Learners National Instructional Conference entitled "All Children Can Learn, If" which was held in June 1990 in Dallas. Dissemination of results from several Texas Education Agency supported projects occurred during this conference.

- The publication *Working Together to Support At-Risk Youth*, developed in the 1987-88 school year through Texas Education Agency funding, continues to be a valuable resource to school personnel working with students who are at risk of dropping out of school.
- During the 1988-89 school year, the Texas Education Agency sponsored four projects which developed model programs for at-risk students. The intent of the projects was to link vocational education and alternatives to social promotion. Programs were developed in a large school district, in a small school district, in one that emphasized serving limited English proficient students and in one that emphasized serving handicapped students.
- The clearing house for dropout prevention, initiated in 1988 in response to Section 11.206 of the Texas Education Code, continues in operation. Information on dropout programs and services and on prevention and recovery strategies continues to be disseminated to local providers of dropout programs.
- The Texas Education Agency during April 1989 sponsored a statewide At-Risk Coordinators Conference to inform district coordinators about alternatives to social promotion programs.

Career Development Strategy 1-C:
Provide rules which will assure equal access to vocational education programs for all persons in Texas, including handicapped, disadvantaged, and limited English proficient students.

- Districts currently provide the Texas Education Agency with assurances that information is being disseminated to the appropriate persons. The actual dissemination of the information is verified during Texas Education Agency compliance monitoring visits.
- The State Board rules contained in 19 TAC 75, Subchapter I, Special Provisions for Vocational Education, have several sections designed to assist local districts in providing equal access to all students. Adherence to these rules is verified during Texas Education Agency compliance monitoring visits.

Career Development Strategy 1-D:
Provide programs, services, and activities that will meet the special needs and enhance the participation of targeted populations in vocational programs.

- The development of support systems for students with special needs has been encouraged through guidelines presented in the standard application for vocational programs that is mailed each year to districts, through Agency staff presentations at numerous regional and statewide workshops, and through on-site technical assistance visits by Agency staff.
- Adult vocational training and retraining programs were provided by districts to 14,123 individuals during school year 1988-89 and to 16,040 individuals during school year 1989-90. These programs were closely coordinated with representatives of local business, industry, the Texas Employment Commission, and administrative entities of the Job Training Partnership Act and the Adult Education Act.
- Vocational programs and services were provided during the 1988-89 school year to 3,037 out-of-school youth and adults through programs administered by the Texas Education Agency. During the 1989-90 school year, 3,809 individuals were served. These programs were specifically designed to link community-based organizations and independent school districts.
- Apprenticeship training programs provided related instruction administered by the Texas Education Agency during the 1988-89 school year to 3,216 adults and 2,901 adults during the 1989-90 school year.
- During the 1988-89 school year, a wide range of vocational programs and services were provided to: 44,178 handicapped students and 186,792 disadvantaged students, including 26,542 students with limited English proficiency. During the 1989-90 school year, programs and services were provided to: 43,950 handicapped students and 192,118 disadvantaged students, including 26,708 students with limited English proficiency.

- Programs for single parents and homemakers have been developed using federal vocational education project funds. These programs provide for child care, transportation, and other support services that enable these individuals enrolled in vocational programs to develop needed parenting and labor market skills. During the 1988-89 school year, 25 projects were funded. Of these, eight were awarded to small and rural schools; 17 projects were conducted in schools with ADA over 5,000 (medium and large districts). During the 1989-90 school year, 76 projects were funded. Small schools were served through 29 funded programs, and medium and large districts conducted 47 funded programs.

- In 1988-89, five school districts and seven education service centers (ESCs) conducted programs designed to eliminate sex bias and stereotyping in vocational education supported by federal vocational education project funds. For 1989-90, funding was limited to the ESCs and all 20 centers participated. In addition to the 20 regional projects, one statewide project to disseminate information relative to the elimination of sex bias and stereotyping was awarded to a local school district.

- The Texas Education Agency provides vocational education programs for criminal offenders serving at six campus sites of the Texas Youth Commission and 33 campus sites of the Windham School System (the Texas Department of Criminal Justice). During the 1988-89 school year, programs were provided to 2,431 students at the Texas Youth Commission and to 8,843 students in the Windham School System. During the 1989-90 school year, programs were provided to 2,968 students at the Texas Youth Commission and to 9,910 students in the Windham School System.

- A technical assistance document, *Guidelines for Serving Special Needs Students in Vocational Education*, was developed by vocational education program staff. Since July 1989, the guidelines have been disseminated to general education, vocational education, and special education administrators and counselors through workshops and individual requests.

- The Texas Education Agency supported a project during 1989-90 which addressed the coordination of vocational and academic education. Six school districts with diverse demographics were involved in the development of the project. School personnel received inservice training and assisted in the development of the handbook and videotapes related to the project.

- The development of career portfolios for handicapped students was supported through the Texas Education Agency during the 1989-90 school year. The portfolio is an evaluation of a student's degree of competency in employability skills, work related social skills, self-help/independent living skills, generalizable academic skills and job specific skills. The portfolios may be used by school personnel in both planning and instruction leading to transition and in identifying employability skills required for graduation.

- The Texas Education Agency continues to support transition from school to work for special needs students. In 1989, the Agency supported the additional development of instructional materials for transition compatible with those developed in 1987-88.

- A vocational assessment handbook, previously developed through funding from the Texas Education Agency, continues to be used as a valuable resource by school personnel who provide vocational assessment for students with special needs.

- The Vocational Information Center includes a lending library and other teacher oriented services which were supported by the Texas Education Agency during 1988 through 1990. The library houses over 3,000 titles of vocational special needs materials which are available by request for use by teachers and administrators in this state.

- In response to Senate Bill 417, 71st Legislature, Texas Education Agency staff worked with representatives of the Texas Commission for the Blind, Texas Department of Human Services, Texas Department of Mental Health and Mental Retardation, Texas Employment Commission, and the Texas Rehabilitation Commission to develop a Memorandum of Understanding (MOU) on transition planning for students enrolled in special education. In June 1990 rules, consistent with the intent of the MOU, were developed

and approved by the State Board of Education in 19 TAC 89.246. The MOU identifies instruction and support services that may be required by students with disabilities during their transition from school to post-school activities.

Career Development Strategy 1-E:
Intensify career guidance activities for all secondary students.

- During the 1988-89 school year, 27,749 students participated in Career Investigation, the state approved career development and planning elective course offered at grades 7 and 8. In 1989-90, 22,668 students participated in Career Investigation.
- Over 500 vocational/career guidance personnel received inservice training in providing career development and planning guidance activities for students in grades 7-12.
- During the 1989-90 school year, a project was funded to identify, develop, and implement a career development guidance and counseling program model for the delivery of comprehensive vocational/career development activities to all students at grades 7-12.
- Through the regional education service center equity coordinators, many school districts were made aware of Career Investigation, a career development guidance elective course which enables students in grades 7 and 8 to develop and apply skills and knowledge in career and educational planning.
- A Texas Education Agency professional vocational education staff member, trained in special education, continued to provide leadership and direction to school districts concerning special assessment and counseling activities for special populations. This individual made presentations at various workshops and also provided technical assistance to districts upon request. Curriculum and program development projects addressing the needs of special populations were also conducted.

GOAL 2: CURRICULUM—
A well-balanced curriculum will be taught so that all students may realize their learning potential and prepare for productive lives.

The information and skills necessary to prepare students for self-sufficiency and continued learning are imparted through the curriculum. The curriculum must be arranged so that all children, regardless of their varied abilities and talents, are continually challenged and acquire the body of knowledge and life tools commensurate with their level in the educational system. Since elementary and secondary schooling constitute only a segment of the learning that the populace undertakes, schooling must prepare young people with the information, the inquisitiveness, and the confidence to sustain competence and learning throughout their lives. Four career development strategies address this goal.

Career Development Strategy 2-A:
Utilizing the State Board of Education process for review and revision of state curriculum, develop and integrate computer related competencies, and develop and integrate essential elements for career opportunities and personal and social values related to the dignity of work and include as appropriate in courses required to be taught in grades K-8.

- A comprehensive curriculum guide for Career Investigation, taught in grades 7 and 8, was developed to provide a smooth transition to the implementation of the new essential elements. The Career Investigation curriculum guide was disseminated free to all Career Investigation teachers.
- To enable experienced and/or new Career Investigation teachers to develop techniques and strategies for teaching the new essential elements, five regional inservice training workshops were conducted during the Fall of 1988.

- A curriculum newsletter, *Career Investigator*, providing information on new and innovative career development guidance activities and instructional materials, was developed and distributed to over 1,000 Career Investigation teachers and vocational/career counselors.
- The Life Science, Earth Science, and Career Investigation courses, taught at grades 7 and 8, include elements related to career opportunities.
- The Texas History, American History, Career Investigation, and Life Management Skills courses address essential elements designed to develop personal and social values related to the dignity of work.

Career Development Strategy 2-B:
Utilizing the State Board of Education process for review and revision of state curriculum, develop essential elements for career opportunities and personal and social values related to the dignity of work and include as appropriate in courses required to be taught in grades 9-12.

- Courses in Economics, Health, Mathematics, Science, and Social Studies include elements related to career opportunities.
- Courses in Economics, Science, and Social Studies include essential elements designed to develop personal and social values related to the dignity of work.

Career Development Strategy 2-C:
Provide quality vocational education programs, services, and activities that will assist all individuals in developing and pursuing their education and career goals and in obtaining skills and competencies necessary to compete in present and future labor markets.

- New curriculum materials were developed that address the reinforcement of the basic skills of reading, writing, science, social studies, and mathematics in vocational education. Professional improvement conferences conducted for vocational teachers during the summers of 1989 and 1990 included sessions related to reinforcing basic skills in vocational education.
- The essential elements for Introductory Industrial Technology Education in grades 7 and 8 have been developed, approved, and are being taught in middle schools. Curriculum materials are currently available.
- All prevocational courses in grades 7-12 have been discontinued. Specific occupational training continues to be postponed until the latter years of secondary education.
- The new Life Management Skills course was developed, approved, and is being offered in grades 7 and 8. Course content includes essential elements relating to character development, decision-making/problem solving, relationships (family and peer), parenting, self-responsibility, nutrition, communication skills, and management of resources. Curriculum materials have been developed and disseminated. School districts began implementing this course in the 1988-89 school year. The course was required to be offered at grades 7 and 8 beginning in September 1989.
- During 1989-90 a project was funded to develop appropriate curriculum materials for Alternatives to Social Promotion programs.
- Vocational Education for the Handicapped courses based on student needs at grades 7 and 8 continue to be offered. A new vocational education course, Individualized Vocational Education, was initiated during the 1988-89 school year. This course provides community-based instruction for severely handicapped students. Both types of courses support the transition from school to work for handicapped students.

- The essential elements common to all vocational education programs for grades 7-12 are designed to increase the emphasis on basic education, work ethics and attitudes, and work skills necessary for students to become effective homemakers and/or wage earners.
- To ensure that Career Investigation teachers and local school administrators implement quality Career Investigation programs, the document *Guidelines for Conducting a Quality Career Investigation Program*, was developed and distributed free to all teachers of the course during 1989-90. Both administrators and teachers received inservice training on how to use the document.
- Basic Vocational Education (BVE) is a new course offered for the first time during school year 1988-89. BVE is designed for serving students at risk of dropping out of school and students with mild handicaps. Essential elements and curriculum and materials have been developed for this new course. Teacher training is provided for first-time teachers of BVE.
- Two applied physics courses entitled "Principles of Technology I and II" were approved by the State Board and implemented in the public schools during 1988-89 and 1989-90.

Career Development Strategy 2-D:
Initiate new courses in application of basic skills, agricultural sciences, home economics, and technology education.

- New and revised courses and essential elements were developed and approved for home economics, agricultural science and technology, and industrial technology education. New curriculum guides have been developed and disseminated, and intensive inservice training continues. Schools began implementation of the new courses/curriculum in September 1988.

GOAL 3: TEACHERS AND TEACHING— Qualified and effective teachers will be attracted and retained.

The master plan is designed to improve the quality of student learning. Quality learning demands quality teaching. Teachers must themselves be well educated to be effective. They must be able to work in surroundings in which other professionals would be satisfied to work, and they must be well compensated in general as well as rewarded for their successes. Two career development strategies address Goal 3.

Career Development Strategy 3-A:
Provide vocational education teachers with the skills and knowledge necessary for: (1) the technological changes in their field, (2) the implementation and operation of competency-based instruction, (3) assisting students in nontraditional roles, (4) using other instructional technologies, (5) full integration of students with special needs, and (6) integrating basic skills instruction into vocational education curriculum.

- Texas Education Agency staff continues to regularly consult with leaders of business and industry, the Texas Council on Vocational Education, teachers, and teacher educators to develop methods for preparing teachers to provide instruction in the revised curriculum under the master plan. Each of these groups review and make recommendations concerning proposed professional improvement projects sponsored by the Agency.
- Requests for proposals to pilot effective programs to deliver preservice and inservice teacher education were issued in 1989 and 1990.
- Professional improvement conferences for vocational education personnel were attended by approximately 8,750 teachers and administrators in 1989 and by approximately 9,000 teachers and administrators in 1990.

- During the 1988-89 school year, the Texas Education Agency supported a project which trained teachers in a large school district to become trainers of trainers. Based on one of the model at-risk projects funded during 1987-88, teachers had the opportunity to develop special skills for teaching at-risk students and to develop training activities for dissemination to other teachers in the district and region.
- The Texas Education Agency supported projects during the 1988-89 and 1989-90 school years to provide one-week workshops for certified teachers who were to begin the community-based instruction for the severely handicapped students enrolled in Individualized Vocational Education (IVE).
- A one-week inservice training workshop was sponsored by the Texas Education Agency during August of 1989 and 1990. The workshop was for certified vocational education teachers who were seeking approval to teach the new Basic Vocational Education class. The training was based on the curriculum/materials which were developed through funding from the Texas Education Agency during the 1987-88 school year.
- A project was funded during the 1989-90 school year through the Texas Education Agency which provided instruction for vocational education teacher educators. Some of the additional skills required by teachers who teach special needs students were presented. Future vocational education teachers will benefit from this additional training for the vocational teacher educators.
- The Vocational Information Center project annually hosts the Vocational Special Needs Conference which usually attracts over 500 practitioners. The conference provides inservice education for teachers and administrators by disseminating innovative teaching methods and promising practices in the education of special needs students.

Career Development Strategy 3-B:
Develop effective methods for recruiting vocational education teachers with relevant experience in business and industry to meet identified needs.

- Technical assistance relating to teacher recruitment is currently provided on an as needed basis. Strategies to develop effective recruitment methods will be addressed in the future.

GOAL 4: ORGANIZATION AND MANAGEMENT— The organization and management of all levels of the educational system will be productive, efficient, and accountable.

All levels of the educational system must be managed productively and efficiently with responsibilities clearly assigned to people whose skills and resources allow them to conduct their work effectively and to be held accountable for it. Administrators must be knowledgeable about the latest economic and demographic trends in order to plan vocational education programs that meet the needs of students and business and industry. Districts and state leadership must engage in continuous, systematic, statewide and local planning. Four career development strategies address this goal.

Career Development Strategy 4-A:
Provide an effective and efficient management system for administering vocational education programs and related activities.

- The Texas Education Agency has developed and implemented a Public Education Information Management System (PEIMS) to streamline data collection activities and enhance administrative procedures.
- A state staff of professional and support personnel qualified by education and experience has been provided in sufficient numbers to enable the State Board to ensure the proper administration of vocational education.

- The current Texas Education Agency administrative structure clearly defines the roles, responsibilities, authority, and accountability to efficiently manage vocational education. The Division of Vocational Education Programs is responsible for program development, curriculum development, personnel training, coordinating the annual update of the *Master Plan for Vocational and Technical Education*, youth leadership activities, and the sunset review process. The Division of Vocational Education Funding and Compliance is responsible for all legal/fiscal matters, compliance monitoring, the State Plan for Federal Vocational Education funding, and data collection and reporting. The Division of Special Programs Planning is responsible for quality work force planning. The Division of Adult Education/Employment and Training is responsible for all phases of adult training and retraining, including programs for criminal offenders, services and activities for Job Training Partnership Act participants and State Legalization Impact Assistance Grants participants, and apprenticeship training.

- State leadership and assistance in the development, improvement, assessment, and accountability of vocational education programs, services, and activities is an ongoing process provided through professional improvement conferences, project sponsorship, technical assistance, and on-site visits.

- The sunset review process designed to ensure the quality and effectiveness of vocational education programs was refined by Agency program staff during 1988-89 and 1989-90. School district personnel use the results of the sunset review process to identify deficiencies in the management and operation of vocational education programs, as well as areas that need improvement.

Career Development Strategy 4-B:
Provide information for school districts to use in the development of local vocational education plans.

- A program application process was developed for districts which use labor market information in the planning process. The application, mailed to districts in May 1988, provides information to districts about occupations important to the future economy of Texas and the courses that provide training related to those occupations. Occupations were evaluated in light of the latest available labor market information regarding the number of projected annual average job openings to 1995, occupational growth-to-replacement ratios, training times, and wage rates.

Career Development Strategy 4-C:
Priority shall be given to requests for vocational programs specifically identified on a list of priority occupations approved by the State Board of Education.

- A preliminary list of priority occupations was presented for review by the State Board of Education at its November 1989 meeting. Occupations on the preliminary list were projected to have at least 500 annual average job openings, a positive growth to replacement ratio, specific vocational preparation training times of over three months through four years, and an average prevailing wage rate of at least $6.00 per hour.

- The preliminary list of priority occupations was reviewed during November and December 1989 by a panel of 30 independent experts representing both the public and private sectors.

- The preliminary list of priority occupations and input from the panel of experts were reviewed by members of the Joint Liaison Committee in January 1990.

- After considering input from the panel of experts and the Joint Liaison Committee, the State Board approved a final list of priority occupations at its January 1990 meeting.

- The list of priority occupations was distributed with program applications in May 1990.

Career Development Strategy 4-D:
Increase local responsibility for quality vocational education programs.

- The sunset review evaluation process was refined during 1988-89 to reflect recommendations made by the local school districts who piloted the process during 1987-88. Refinements included deleting all compliance-oriented statements, adding statements to address serving special needs students in vocational education, and identifying specific career development guidance and counseling activities affecting student placement in vocational education.
- During the 1988-89 school year, 2,735 vocational education programs participated in the sunset review evaluation to ensure the quality and effectiveness of the programs. The vocational education programs staff conducted 106 on-site sunset review visits of programs identified from the 1987-88 evaluation process. During the 1989-90 school year, 2,305 individual vocational education programs underwent the sunset review evaluation while staff conducted 57 on-site visits.

GOAL 5: FINANCE— The financing of public education will be equitable to all students in the state.

The biggest challenge facing Texas education today is the need to increase financial support at the state level while maintaining and improving equity. An equitable system of public school finance is essential in order to realize quality education for all students. Full achievement of this goal is a formidable challenge because of the tremendous diversity in the educational needs of students and the types of districts in which they are educated. Two career development strategies address this goal.

Career Development Strategy 5-A:
Seek legislative authority to allow the State Board of Education to establish differential funding weights for vocational education courses.

- The State Board of Education recommended that the 71st Texas Legislature repeal the single funding weight for vocational education programs and allow the State Board to determine weights for general vocational education, pre-employment laboratory, vocational education for special needs students, and incentives to implement master plan initiatives. This recommendation was accepted with the provision that weights adopted by the State Board would become effective beginning with the 1991-92 school year only if such weights were adopted by the Legislature. The statute is codified as Subsections 16.155(b) and (c), Texas Education Code.

Career Development Strategy 5-B:
Provide financing and other resources to administer, plan, develop, implement, evaluate, and coordinate vocational education programs, services, and activities.

- Agency staff are in continuous contact with state and federal legislative leaders relating to future funding for public education.
- During 1988-89 and 1989-90, the Texas Education Agency provided continued funding to the State Occupational Information Coordinating Committee to provide technical assistance on the use of the toll-free career information hotline and to manage the computer-based career information system at Region XX Education Service Center in San Antonio.
- During 1988-89 and 1989-90, projects were funded to provide certification courses and professional development workshops for vocational administrators, vocational counselors, and career investigation teachers.

- An agency-wide plan entitled "Coordinated Resources for Managing School Evaluation and Technical Assistance" has been implemented. The plan is designed to strengthen the coordination of accreditation, funding, compliance, curriculum, and program development functions. The implementation of this process will help Texas Education Agency staff in their efforts to provide the necessary technical assistance to enable schools to strengthen their accountability process.

GOAL 6: PARENT AND COMMUNITY INVOLVEMENT— Parents and other members of the community will be partners in the improvement of schools.

Parents' involvement in their children's education contributes to improved student achievement, attendance, motivation, self-concept, and behavior. Parents also gain through participation in education as their beneficial involvement in their children's lives increases. Similarly, both schools and the community at large gain when they support one another's aims; both educational and community resources can be better utilized in a mutually supportive atmosphere. Two career development strategies address Goal 6.

Career Development Strategy 6-A:
Utilize local vocational advisory committees to assist with the planning, evaluation, improvement, and promotion of vocational education programs.

- Local vocational advisory committees have had an ongoing responsibility to assist districts with the planning, evaluation, improvement, and promotion of vocational education programs. Texas Education Agency on-site monitoring teams verify the presence and activities of these committees.
- State Board rules (19 TAC 75, Subchapter I, Special Provisions for Vocational Education) for local advisory committees require the participation of parents as well as local business and industry representatives.

Career Development Strategy 6-B:
Develop and implement a plan to include business and industry and other interested persons in becoming active partners with vocational education for student achievement.

- Twenty-four Quality Work Force Planning Committees have been established. These committees involve business and industry representatives as equal partners in the program planning process, to develop strategies to seek out and use community resources, and to promote a positive image of vocational education and its impact on economic development.
- Programs are jointly conducted at the local level by community-based organizations and independent school districts to provide vocational education support activities for economically and educationally disadvantaged youth. Local school districts and community-based organizations are encouraged to design their program to meet the conditions in their community and to serve those individuals most in need. The Texas Education Agency promotes the program, provides technical assistance and guidance in the implementation of the program, monitors the program, and assists in final project evaluation.
- Employer-based facilities for vocational training in occupations in which rapid technological advancement occurs are being used through cooperative education and technical education internship programs.
- Business and industry representatives were involved in providing teachers with information about the latest technological changes during the annual summer professional improvement workshops in 1987 and 1988.
- School districts utilized business and industry representatives in the sunset review evaluation process conducted during 1988-89 and 1989-90.

GOAL 7: INNOVATION—
The instructional program will be continually improved by the development and use of more effective methods.

The constant in education today is change—changing student populations, changing demands and expectations, and changing resources. Traditional approaches are often inadequate to prepare students to live in a changing society. Reforms that have been undertaken must be supported, maintained, and evaluated. Those that have been planned for the future must be implemented. Two career development strategies address the goal of innovation in the master plan.

Career Development Strategy 7-A:
Identify the need for and design innovative vocational education instructional programs and exemplary practices.

- Five projects were jointly funded by the Texas Education Agency and the Texas Higher Education Coordinating Board to develop 2 + 2 programs linking the secondary and postsecondary technical education curriculum. These projects were in the areas of Telecommunications, Agricultural Science, Health Occupations, and Industrial Electronics.
- The process of determining priority occupations and the process of identifying new and emerging occupations through the Quality Work Force Planning Committees ensure that vocational education programs will stay current with developments in business and industry. Representatives from the Texas Innovation Information Network System are serving on these committees to provide information on emerging technologies to program planners.

Career Development Strategy 7-B:
Vocational instruction will be continually improved by the development and use of more effective strategies and methods.

- A project to develop and implement a distance learning delivery system for Health Occupations programs was conducted.
- Vocational administrators and teachers received extensive inservice training in the identification and use of proven instructional strategies to meet the individual and unique learning needs of students, such as cooperative learning techniques, matching student learning style and instructional arrangement, global versus analytic teaching techniques, and creating a positive learning environment.

GOAL 8: COMMUNICATIONS—
Communications among all public education interests will be consistent, timely, and effective.

Accurate, consistent, timely, and effective communication among all the publics interested in the schools is essential if a satisfactory working relationship based on mutual trust is to exist. All interested groups benefit when a system of communication functions optimally. Public education derives its support from a public that is accurately informed about local schools and educational developments at the state level. Goal 8 is addressed by two career development strategies.

Career Development Strategy 8-A:
Inform the public concerning the role of vocational education as it impacts personal, social, and career goals of individuals and the economic development of the state.

- Numerous documents were developed and disseminated to provide schools with the guidance necessary to implement the master plan at the local level. The documents have been disseminated through mass mailings and also as handouts during numerous informational and inservice meetings.
- During 1989-90, the Texas Education Agency contracted with the University of North Texas to develop two videotapes and an accompanying brochure to provide information to the public on the role of vocational education. "It's Not Your Father's Vo-Tech" was designed to inform students about the role vocational education plays as it impacts their personal, social, and career goals. "Building a Better Texan," aimed at parents, community, civic, and service organizations, stresses the role of vocational education in the state's economic development. The videotapes were distributed to the 20 Education Service Centers, the Agency program directors, and the Texas Council on Vocational Education.

Career Development Strategy 8-B:
Provide the most timely and accurate labor market and career information available to satisfy the needs of state, regional, and local vocational education planners.

- The State Occupational Information Coordinating Committee (SOICC) maintains and distributes labor market information to planners from the Statewide Labor Market Information System.
- The SOICC Educational Specialist provides on-site technical assistance in the use of labor market information for career development and educational planning activities to classroom teachers, counselors, and students through campus, classroom, and staff development activities across the state.

EVALUATION OF SECONDARY VOCATIONAL/ TECHNICAL EDUCATION PROGRAMS

Public independent school districts in Texas provided vocational education programs, services, and activities to 613,080 secondary students during the 1988-89 school year and to 593,921 secondary students during the 1989-90 school year. Table I-1 presents these enrollments by program area. State and federal expenditures for secondary vocational education were $278,583,385 for school year 1988-89 and approximately $284,427,705 for school year 1989-90. Table I-2 presents expenditure data by funding source for these years.

The Texas Education Agency and independent school districts throughout the state conducted five major types of evaluation activities during the past two school years to qualitatively and quantitatively evaluate the state's vocational education programs, services, and activities. These five major evaluation activities included on-site accreditation visits by Agency staff to school districts, on-site compliance monitoring visits by Agency staff, developing and implementing methods of administration for complying with civil rights requirements in vocational education, and developing and implementing a sunset review process to ensure the quality and effectiveness of vocational education programs. In addition, Agency staff analyzed evaluative data submitted by school districts for students who have completed vocational education programs and graduated from high school.

ON-SITE COMPLIANCE MONITORING

During the past two school years, the Texas Education Agency conducted on-site compliance monitoring visits to 465 school districts. Of this group, discrepancies were cited in 360 districts. No discrepancies were found in 105 districts. In 1989-90, the designated year for full implementation of the master plan, 22 school districts were cited for failure to have achieved implementation.

Compliance monitoring is designed to determine whether a school district is complying with applicable state laws, State Board of Education rules, and federal laws and regulations and, where problems are found, to assist the district to come into compliance. One month in advance of the scheduled date of the visit, a district is sent the monitoring instrument plus the name and telephone number of a contact person who can give technical assistance in preparation for the visit.

During the site visit, all problem areas are discussed fully with the superintendent and vocational personnel. Verbal commendations are given for programs and procedures which appear to be exemplary. Staff give technical assistance and aid schools in correcting many problems. At the exit conference, the superintendent is given a list of discrepancies being cited. After the visit, a detailed report is mailed listing each discrepancy, the legal authority for the citation, and the recommended corrective action. A district has 60 days to correct discrepancies and submit documentation of these corrections to the monitoring teams, bringing the district into compliance.

One area of needed improvement was the implementation of procedures to track the receipt and expenditure of federal vocational funds to a specific funding category and by service and activity as required by the Carl D. Perkins Vocational Education Act. The procedures also must track the expenditure of nonfederal funds in the same way in order to provide an audit trail for the matching required by federal law. Extensive technical assistance was given to assist districts in implementing accounting codes and procedures to meet this requirement.

CIVIL RIGHTS EVALUATIONS

In addition to conducting evaluations through on-site compliance monitoring visits, Texas Education Agency staff developed and implemented methods of administration for carrying out the state's civil rights obligations. These evaluative activities and procedures were developed under the United States Department of Education, Office of Civil Rights guidelines for eliminating discrimination on the basis of race, color, national origin, sex, handicap, or age in vocational education in public secondary schools. The methods of administration and related procedures included:

1. an Agency-level review of pertinent data submitted annually to TEA by all independent school districts;

2. an on-site review to verify that:

   a. district policies, procedures, and practices relating to vocational education comply with civil rights requirements in vocational education;

   b. students who desire to participate in vocational education were not denied access to vocational education because of race, color, national origin, sex, handicap, or age;

   c. equal provisions, equal opportunity, and equal treatment were provided to all students wanting to participate in vocational education; and

3. the use of technical assistance as a means for preventing civil rights violations.

Districts receive at least one formal announcement annually of the availability of technical assistance for preventing discrimination in vocational education, detecting such discrimination, and identifying necessary corrective action.

Technical assistance was provided in a variety of ways, including: advice on particular questions; dissemination of written materials; training sessions for teachers, counselors, and administrators; assistance with the revision of recruitment and promotional materials; and technical advice on eliminating architectural and equipment barriers that prevent handicapped students from participating in vocational education.

The most frequent citations in civil rights areas were: (1) the district's pre-employment inquiries contained personal questions that were not relevant or specific to the position or job advertised; (2) each vocational program was not readily accessible to mobility-impaired students; (3) individual education plans (IEPs) for handicapped students enrolled in vocational education through the admission, review, and dismissal (ARD) process do not include all of the required components for vocational education; (4) the local education agency had not made the required public notice to students, parents, employees, and the general public; and (5) the district did not include a notice of nondiscrimination on the basis of race, color, national origin, sex, or handicap in its recruitment information, and/or enrollment criteria, student handbook, catalogs, or other publications for its students and employees.

SUNSET PROGRAM REVIEWS

Another major evaluation effort for the Texas Education Agency and independent school districts involved the sunset review evaluation process for vocational education programs. During the 1988-89 school year, Agency program staff made refinements in the review process based on recommendations from the school district personnel.

During the 1988-89 school year, evaluation teams made up of business, industry, and general education personnel evaluated 2,735 vocational education program units. Agency program staff conducted on-site visits to 106 program units with significant deficiencies in the reported data. During the 1989-90 school year, 2,305 program units were evaluated through the sunset review process, while Agency program staff conducted 57 on-site technical assistance visits.

Independent school districts are now using the sunset review evaluation process to conduct vocational education program evaluations on a yearly basis.

PROGRAM COMPLETER EVALUATIONS

The last major evaluation activity involved the analysis of data submitted by school districts for students who have completed vocational education programs and graduated from high school. Former students from the 1987-88 and 1988-89 school years were surveyed by districts during the 1988-89 and 1989-90 school years respectively, when data were submitted to the Texas Education Agency. Former students from the 1989-90 school year will not be surveyed until the 1990-91 school year. Thus, data for these students are not yet available.

Analysis of the data for 1987-88 for 62,850 former students reveals that 38.7 percent of the state's vocational education program completers pursued additional education, 24.8 percent of completers obtained employment in a field related to training, and 10.7 percent of completers found employment in a field not related to training. Much smaller percentages of completers entered the military (5.7 percent), were unemployed (5.3 percent), or were not in the labor force (3.4 percent). The status of 11.4 percent of the completers for the 1987-88 school year was unknown.

Analysis of the data for 1988-89 for 58,909 former students reveals that 39.33 percent of the state's vocational education program completers pursued additional education, 24.87 percent of completers obtained employment in a field related to training, and 10.12 percent of completers found employment in a field not related to training. Much smaller percentages of completers entered the military (5.94 percent), were unemployed (5.45 percent), or were not in the labor force (4.13 percent). The status of 10.17 percent of the completers for the 1988-89 school year was unknown. Table I-3 presents 1988-89 completer status data for each vocational education program area.

More detailed analysis of the 1987-88 data revealed that of the 25,726 completers available for employment (i.e., completers actually in the labor force), 60.5 percent were placed in jobs related to training, 26.4 percent were placed in jobs not related to training, and 13.1 percent were unemployed. The average hourly wage for completers employed full time in a field related to training was $4.87.

More detailed analysis of the 1988-89 data revealed that of the 26,257 completers available for employment (i.e., completers actually in the labor force), 55.8 percent were placed in jobs related to training, 22.7 percent were placed in jobs not related to training, and 21.49 percent were unemployed. The average hourly wage for completers employed full time in a field related to training was $4.74.

Employers of 1987-88 completers employed full time in a field related to training were surveyed to determine the quality of training received while enrolled in school. Employers evaluated a completer's performance in five work-related areas using a scale with possible scores from "1" (lowest evaluation score) to "5" (highest evaluation score). Statewide average scores, based on data received from 81.2 percent of 14,391 employers surveyed, were 4.36 for technical knowledge, 4.47 for work attitude, 4.44 for work quality, 4.45 for overall rating, and 4.46 for relative preparation.

Employers of 1988-89 completers employed full time in a field related to training were surveyed to determine the quality of training received while enrolled in school. Employers evaluated a completer's performance in five work-related areas using a scale with possible scores from "1" (lowest evaluation score) to "5" (highest evaluation score). Statewide average scores, based on data received from 80 percent of 13,675 employers surveyed, were 4.35 for technical knowledge, 4.48 for work attitude, 4.45 for work quality, 4.44 for overall rating, and 4.45 for relative preparation. Table I-4 presents 1988-89 employer scores for each vocational program area.

TABLE I-1

Secondary Vocational Program Enrollments School Years 1988-89 and 1989-90

Program Area	1988-89	1989-90	Percent Changed 1988-89 to 1989-90
Agricultural Science and Technology	87,435	85,410	- 2.3
Basic Vocational Education	-0-	240*	-
Career Investigation	30,447	23,972	-21.3
Comprehensive/Technical Home Economics	184,374	180,742	- 2.0
Health Occupations Education	7,566	8,459	+11.8
Individualized Vocational Education	-0-	78*	-
Industrial Technology Education	122,682	115,654	- 5.7
Marketing Education	34,549	25,640	-25.8
Occupational Home Economics	24,238	20,764	-14.3
Office Education	50,505	55,287	+ 9.5
Trade and Industrial Education	71,284	77,675	+ 9.0
TOTAL	613,080	593,921	- 3.0

*New programs initiated in 1989-90.

TABLE I-2

State and Federal Funds for Secondary Vocational Education

	Expended 1988-89	Expended 1989-90	Budgeted 1990-91
Local School Districts			
Foundation School Funds (including Vocational Transportation)	$244,156,919	$250,674,400	$303,145,789
Federal Vocational Education Funds (Carl D. Perkins Vocational Education Act, P.L. 98-524)			
With State Administration	34,426,466	33,753,305	58,048,044
Without State Administration	32,664,372	32,046,728	55,709,901
Total Secondary			
With State Administration	$278,583,385	$284,427,705	$361,193,833
Without State Administration	$276,821,291	$282,721,128	$358,855,690

TABLE I-3

Status of 1988-89 Secondary Vocational Program Completers by Major Program Area*

Program Area	Total Follow-Up	Military	Empl. in Field Rel. To Training	Empl. in Field Not Rel. To Training	Pursuing Additional Education	Unemployed	Not in Labor Force	Status Unknown
Agriculture	3,876	8.31%	23.84%	14.40%	37.69%	5.01%	2.27%	8.51%
Health Occupations	3,052	2.82%	12.22%	4.06%	54.00%	10.16%	10.75%	6.03%
Marketing Education	11,010	7.05%	36.33%	7.43%	30.94%	4.16%	3.41%	10.69%
Occupational Home Economics	7,337	5.07%	27.38%	13.03%	34.02%	5.72%	5.68%	9.09%
Office Education	15,953	2.62%	19.65%	6.84%	51.85%	4.78%	3.99%	10.29%
Trade and Industrial	17,681	8.61%	23.82%	13.65%	33.28%	6.05%	3.32%	11.27%
TOTALS	58,909	5.94%	24.87%	10.12%	39.33%	5.45%	4.13%	10.17%

*Follow-up survey data reported are for students who completed a vocational program and graduated during the 1988-89 school year. Data were collected from completers during the 1989-90 school year.

TABLE I-4

Employer Ratings of 1988-89 Secondary Vocational Program Completers Employed Full-Time in a Field Related to Training*

Program Area	Surveys Mailed	Surveys Returned	Technical Knowledge	Work Attitude	Work Quality	Overall Rating	Relative Preparation
Agriculture	960	749	4.23	4.40	4.34	4.35	4.42
Health Occupations	351	278	4.38	4.51	4.52	4.59	4.45
Marketing Education	3,541	2,833	4.37	4.48	4.47	4.46	4.48
Occupational Home Economics	1,827	1,530	4.40	4.50	4.52	4.53	4.57
Office Education	2,928	2,304	4.40	4.52	4.46	4.47	4.39
Trade and Industrial	4,068	3,247	4.31	4.44	4.42	4.38	4.41
TOTALS	13,675	10,941	4.35	4.48	4.45	4.44	4.45

*Employer follow-up data were collected during the 1989-90 school year from employers of students who completed a vocational program, graduated during the 1988-89 school year, and were employed in a field related to training. Employers evaluated a completer's performance in five work-related areas by using a scale with possible scores from "1" (lowest evaluation score) to "5" (highest evaluation score).

SECTION II
HIGHER EDUCATION

The original Master Plan for Vocational Education, approved by the State Board of Education in January 1987, supported the development of a skilled work force for Texas. Part II of the initial document was entitled *Master Plan for Postsecondary Technical, Vocational, and Adult Education*, and it included 12 goal areas, with a total of 52 goals.

UPDATE OF THE HIGHER EDUCATION SECTION OF THE MASTER PLAN

During the summer and fall of 1989, the Texas Higher Education Coordinating Board involved a broad cross-section of leaders from Texas public community colleges and technical institutes and the private sector to do a substantive update of the sections of the Master Plan that addressed higher education issues (Parts II and III). The objective of the revision process was to reformat those parts of the Master Plan, while maintaining all of its original directives, in order to provide Texas with a clear and useful guide for effective organization, management, and coordination of technical/vocational education and training. The Coordinating Board received essential recommendations from a task force, a public hearing, and mailouts to the chancellors/presidents, and technical/vocational deans and administrators of all public community colleges and technical institutes, as well as the directors of the private industry councils. The result was the 1989 update, *Career Opportunities in Texas: A Master Plan for Vocational and Technical Education*. Part II, *Master Plan for Higher Education*, outlines the mission of higher education in Texas and identifies six goals for improvement in higher education, with recommended strategies and general time frames.

THE 1991 PROGRESS REPORT

This *Biennial Report of Progress Under and Compliance with the Master Plan* addresses FY 1989 and FY 1990. To facilitate implementation of the updated Master Plan, this report uses the six goals of the 1989 plan to outline statewide accomplishments for those two years. During FY 1989 and FY 1990, the Texas Higher Education Coordinating Board and Texas public institutions of higher education have made major strides in implementing activities to attain the goals of the Master Plan. An ongoing administrative commitment of the Coordinating Board is to work cooperatively with public community colleges and technical institutes, the Texas Education Agency and the Texas Department of Commerce to address the Master Plan goals.

For example, both the Select Committee on Higher Education and the Strategic Economic Policy Commission recommended that the Coordinating Board (1) develop a clearinghouse on available education and training programs and services, and (2) promote the use of a formal regional planning system to encourage more effective training in response to employer needs and job opportunities. Significant progress has been made on both recommendations, as well as on other Coordinating Board responsibilities, such as developing and implementing program guidelines and evaluation processes.

STUDENT SERVICES

Enrollments in Texas' 49 public community colleges and four technical institutes totaled 410,325 for FY 1989. This included 254,291 students enrolled in degree and certificate technical/vocational programs and 156,034 students enrolled in adult vocational courses. For FY 1990, 233,335 students were enrolled

in degree and certificate programs and 134,077 in adult programs. Total enrollment for FY 1990 was 367,412 students. Texas higher education technical/vocational programs educate significant numbers of special populations, and the race/ethnicity percentages in approved degree and certificate programs reflect the demographic characteristics of the state. See Table II-1.

A total of 3,401 approved programs in 1989-90 are shown by major program area in Table II-2. A review of Table II-3 indicates a decrease of 1,898,981 contact hours from FY 1989 to FY 1990.

Funding support to public higher education institutions is provided through a line-item appropriation by the Texas Legislature. Allocation of these funds to individual institutions is based on contact hours earned by students enrolled in approved programs.

Federal funds are provided by the Carl D. Perkins Vocational Education Act to supplement state and local funding and to provide services, programs, and activities mandated by the Act. These funds are allocated to higher education institutions through a formula based upon need, with the balance distributed to eligible recipients through an application process.

Total higher education expenditures of state and federal funds for FY 1989 and FY 1990 are contained in Table II-4.

TOWARD THE YEAR 2000

To ensure that the Master Plan remains current, the Coordinating Board formed a Task Force to Update the Higher Education Section of the Master Plan for Vocational and Technical Education during 1990-91. The charge of the task force is to update the goals for implementation during 1992-94; clarify the strategies by developing objectives with performance indicators and measurable outcomes; assist in collecting information from institutions of higher education, business and industry, and the general public; and work with the Texas Education Agency and the Texas Department of Commerce to develop quality work force planning follow-up. In particular, the task force will work on technical assistance for the development of 2+2+2 or Tech Prep programs in secondary schools and institutions of higher education.

PROGRESS UNDER AND COMPLIANCE WITH THE MASTER PLAN

GOAL 1: STATE COMMUNICATIONS—

Improve statewide communications about technical and vocational education and training, especially among public education institutions and private sector representatives interested in economic development and educational improvement.

Strategy 1-A: Image of Technical and Vocational Education

Develop statewide and local communication programs to enhance the image of technical and vocational education in Texas and to make individuals aware of the need for continued training to increase their skills.

- The Communications Advisory Committee established by the Coordinating Board continued helping the Community Colleges and Technical Institutes Division in the development and implementation of an overall public information plan to include identification of target publics, appropriate media for communication with constituencies, and the type and frequency of publications. Such a communications

network promoted more effective linkages among principal associations representing the comprehensive mission of the community colleges and technical institutes and assisted in developing a coherent statewide image for the institutions.

- The first issue of the *Coordinates* newsletter was developed and published in spring 1989 by the Coordinating Board. This publication communicates Coordinating Board activities, reviews issues facing community colleges and technical institutes in the state, provides a calendar of upcoming events, and highlights innovative programs at institutions.
- Two projects were funded to inform prospective employers about the characteristics of public higher education institutions. One project produced a generic video program providing a semi-technical summary of cooperative education in Texas and the other project produced a video on apprenticeship training in Texas.
- The Coordinating Board co-sponsored a statewide public policy symposium on developing a skilled and educated work force through regional planning. Other co-sponsors included the Texas Education Agency (TEA), the Texas Department of Commerce, the Texas Council on Vocational Education (TCOVE), and the LBJ School of Public Affairs.

Strategy 1-B: Information Dissemination
Develop mechanisms for communication and dialogue among public community colleges and technical institutes, public schools and the private sector to disseminate information about the accomplishments and benefits of technical and vocational education.

- Joint funding was provided by the Coordinating Board, TEA, and the Texas Department of Commerce to six Quality Work Force Planning projects. These projects focused on identifying the needs of local employers for skilled workers; identifying the types of technical/vocational education programs in the region; and developing a labor market information system for the region.
- In designing an integrated delivery system through regional planning, the Coordinating Board developed rules in cooperation with TEA and the Texas Department of Commerce for the statewide implementation of technical and vocational education regional planning by September 1, 1990.
- The Coordinating Board assisted with the planning and development of higher education databases for the 24 Quality Work Force Planning regions in the state.
- The Coordinating Board funded several projects across the state that developed and aired public television announcements directed toward special populations, primarily single parents and men and women in nontraditional careers. These announcements provided information about technical/vocational education with an emphasis on nontraditional career training, e.g., women in electronics and men in nursing. Other outreach projects included newspaper and radio announcements describing technical/vocational training and student support services such as child care and transportation allowances.
- The Coordinating Board published and distributed directories of Carl D. Perkins discretionary grants awarded through the Coordinating Board for FY 1989 and FY 1990.
- The Coordinating Board funded a project for the development of a database which inventories current economic development, managerial/technical assistance, and training programs in Texas (TEXNET).
- The Coordinating Board published a *Directory of Economic Development Resources in Texas Public Community Colleges and Technical Institutes* in 1989 and funded another project in 1990 which developed a *Directory of Economic Development Resources in Texas*.

Strategy 1-C: Telecommunications Network
Develop and fund a high-quality, cost-effective technical and vocational education telecommunications network to improve communication, faculty training and student instruction.

- Pilot funding was provided to develop a statewide telecommunications network (STARLINK). This project established a teleconferencing network for all higher education two-year institutions in Texas. Future objectives include the development of a teleconferencing handbook, arrangement of access to equipment, and production of additional teleconferences.

Strategy 1-D: Education and Training Clearinghouse
Establish a statewide education and training clearinghouse to maintain inventories of available training and other areas of expertise related to the development of a skilled work force for the state.

- The Coordinating Board worked with the Education and Training Clearinghouse Advisory Committee to pilot test, implement, and validate a vocational and technical program inventory for the state.

Strategy 1-E: State Reporting Systems
Conduct a study of current higher education reporting requirements and processes (including both state and federal regulations) to recommend improved reporting procedures.

- The Assistant Commissioner for the Community Colleges and Technical Institutes Division of the Coordinating Board chaired a committee of the National Council of State Directors of Community/Junior Colleges in its advisory role to the U. S. Department of Education on improving technical/vocational management information systems.
- A continuation project (LONESTAR) to develop a student tracking system was funded by the Coordinating Board.

GOAL 2: EMPLOYER NEEDS— Provide flexible and timely technical and vocational education and training to meet the needs of employers for a skilled work force.

Strategy 2-A: Program Development
Establish and maintain effective technical and vocational programs in public community colleges and technical institutes through a cooperative process of program planning and approval, technical assistance, implementation, assessment and revision.

- The Coordinating Board developed definitions and general guidelines for and provided technical assistance on the use of the new Technical and Vocational Programs Guidelines effective January 1, 1989.
- The Coordinating Board assisted the Interim Study Committee on Proprietary Schools in 1989-90 to ensure that proprietary schools awarding associate of applied science degrees in Texas meet the same standards for degrees as do community colleges and technical institutes.
- The Coordinating Board developed rules for out-of-state and foreign courses offered at no cost to the state as recommended by the Advisory Committee on Role and Mission of Community Colleges.
- The Coordinating Board provided continuing staff support to a statewide 2+2+2 Users Group to disseminate model programs.
- The Coordinating Board updated the Adult Vocational Guidelines and Common Course Manual effective June 1990.

- The Coordinating Board conducted a statewide study on nursing education in Texas.
- Coordinating Board staff assisted the subcommittees of the Advisory Committee on Undergraduate Education to incorporate FIPSE (Fund for the Improvement of Postsecondary Education) instructional competencies into the Core Curriculum Subcommittee guidelines.

Strategy 2-B: Program Evaluation
Assess regularly the quality of technical and vocational programs in public community colleges and technical institutes to assure compliance with quality standards and efficient use of resources in order to meet the needs of employers for a skilled work force.

- The Coordinating Board maintained a cyclical process of evaluating technical/vocational programs, reviewing 27 campuses at 19 postsecondary institutions in FY 1989 and FY 1990.
- The technical/vocational program site evaluation process was refined to incorporate the recommendations of the Coordinating Board Evaluation Advisory Committee, including consistent use of data and implementation of preliminary site visits. A program status section was added to the evaluation instrument in Fall 1989.
- The program evaluation process was linked to the sunset review of technical/vocational programs, as well as the phase-out directive of public four-year institutions which offered associate and certificate programs.
- The Coordinating Board funded a project to develop a needs assessment model to support institutions in their technical/vocational self-assessment studies.

Strategy 2-C: Emerging Technologies, Industries and Occupations
Identify emerging or dramatically changing technologies and targeted industries and their impacts on occupations to assist with planning to provide timely technical and vocational education programs.

- The Coordinating Board funded various projects to identify emerging technologies and occupations and their significance for higher education technical/vocational education, training and retraining. Results of these studies were disseminated to public community colleges and technical institutes in Texas.
- One such funded project improved and expanded the Applied Technology Drafting Program to include the concept of Computer Aided Manufacturing Today, while another project developed and implemented simulated computer-integrated manufacturing (CIM) processes.
- Another project identified trends in the advancement of new technology in automated manufacturing applications, nationally and internationally, to determine their impact on the manufacturing industry in Texas.
- The purpose of one project was to stimulate enhancement of technical/vocational education in the areas associated with the Superconducting Supercollider to be built in Texas, including orientation of educational leaders and preparation of educational materials.
- Another project aimed to improve the quality of instruction in the rapidly growing automotive electronic controls of emissions and safety technologies.
- A work force assessment project in the food and fiber industry identified emerging agricultural industries in four geographic areas of Texas and defined new entry-level technical/vocational occupations in these industries.
- Another project purposed to identify current trends in materials technology in Texas and to characterize this technology as it related to two-year higher education institutions.

Strategy 2-D: Private-Public Partnerships
Involve business, industry and labor representatives as essential contributors to the technical and vocational education delivery system.

- The Coordinating Board, the Texas Education Agency and the Texas Department of Commerce jointly sponsored six regional planning projects to develop models for statewide planning to support an integrated delivery system that matches technical/vocational training with regional job opportunities.
- The Coordinating Board funded a project to design a process for translating employer's task-based performance standards into written tests and performance tests for use in community colleges and technical institutes.
- The Coordinating Board provided funds for a project to create an authentic factory setting for students. An advisory committee with representatives from high-tech manufacturing companies provided input in the formulation and assessment of this project.
- The purpose of another funded private-public partnership project was to develop, implement and evaluate a practical model program for student placement and transition services. The process involved a career development consultant, an advisory committee of industry experts and postsecondary faculty and administration.

Strategy 2-E: Linkages Among Education Systems
Improve coordination among high schools, community colleges, technical institutes, and four-year colleges and universities to link secondary and higher education programs and curricula for specific occupations and to encourage students to continue their education and training.

- The Coordinating Board funded a project designed to increase articulation in agribusiness/farm and ranch management instruction among secondary institutions, two-year higher education institutions, and four-year colleges and universities.
- Two of the Developing a Curriculum (DACUM) projects were funded to offer regional DACUM training to technical/vocational institutions for implementing competency-based curriculum.
- The Coordinating Board and the Texas Education Agency provided joint funding for seven 2 + 2 pilot projects. Pilot projects in the first or second year stage were developed in several program areas, including:

  a. Agricultural Technology;
  b. Telecommunication Technology;
  c. Electronics Technology;
  d. Electronics Engineering Technology;
  e. Transportation Technology;
  f. Health Occupations; and
  g. Business/Office Technology.

GOAL 3: STUDENT NEEDS— Improve and expand education and training services to prepare diverse student populations for occupational opportunities in our state.

Strategy 3-A: Counselor/Instructor Partnerships
Develop mechanisms to encourage communication among secondary school counselors and teachers and postsecondary counselors and faculty to encourage students to participate and succeed in technical and vocational education.

- Two projects called for counselor/instructor partnerships in providing an individualized student program for recipients of Aid to Families with Dependent Children (AFDC). Each program was designed to provide the appropriate technical/vocational job training and contained similar components, such as remedial education, tutoring, literacy development, job search assistance, and technical/vocational and personal counseling.
- One funded project established a coordinated services model to prepare AFDC recipients for employment. The model eliminated duplication of services and provided an in-depth evaluation of skills and interests.
- Two projects were funded to assess Joint Planning Workshops designed to encourage cooperative planning activities among entities serving special populations.

Strategy 3-B: Student Support Services
Provide assessment and testing, financial aid, counseling (personal, academic and occupational), training in basic skills and work place skills, and placement and follow-up services to assist students.

- The Coordinating Board worked with the Texas Academic Skills Council to develop a process to implement basic skills testing by fall 1989.
- Funds were provided for a project to design, develop and pilot test a model follow-up tracking system to be used by two-year higher education institutions to collect and report follow-up data on students who are program leavers and completers.
- A continuation project sought to identify literacy skills within specific vocational settings, offer developmental studies, and evaluate effectiveness through pre-testing/post-testing.
- Coordinating Board staff assisted the Literacy Task Force and examined the role of Texas community colleges and technical institutes with respect to literacy.

Strategy 3-C: Transfer Criteria
Study and recommend new mechanisms to ensure that students can transfer and receive degree-plan credit for successful course work.

- The Coordinating Board established a task force to review the Academic Course Guide Manual, including adopting a provision for a core of 15 semester hours of general education in applied associate degree programs to further facilitate transfer and articulation.
- The Coordinating Board assessed the feasibility of expanding the BEST Transfer Project concept to Texas consortia efforts.
- The Coordinating Board updated the 1986 Transfer Study and the Student Migration Report.
- The Coordinating Board funded a project which surveyed all four-year public institutions in Texas to determine if they accept transfer credits from two-year technical and vocational programs and to obtain articulation agreements from two-year and four-year institutions.

Strategy 3-D: Continuing Education
Promote the concept of lifelong learning to upgrade skills and of retraining to expand occupational skills.

- The training and retraining needs of over 291,111 adult students were met through numerous short-term programs in FY 1989 and FY 1990. Students were seeking entry-level job skills, upgrading job skills, pursuing career changes, and/or obtaining or maintaining licensure.

Strategy 3-E: Services for Special Populations
Develop and evaluate targeted outreach, instructional and support services for students with unique needs, especially women and minority group members, to develop work place entry-level competencies.

- In FY 1989 and FY 1990, public community colleges and technical institutes in Texas enrolled and served five categories of "special population" students as defined by the Carl D. Perkins Vocational Education Act:

  (a) handicapped
  (b) disadvantaged (economically and educationally)
  (c) limited English proficient (LEP)
  (d) single parents/homemakers
  (e) students in nontraditional programs to eliminate sex bias.

- There were 26,122 handicapped students enrolled in technical/vocational programs during FY 1989 and FY 1990. Funds were provided for tutors, special counseling and guidance activities, special student support services, and adapted equipment such as electronic dictionary/spellers with speech and braille writers.

- Economically and educationally disadvantaged students enrolled at Texas public community colleges and technical institutes totaled almost 224,681 in FY 1989 and FY 1990.

- There were 43,019 LEP students enrolled in technical/vocational training programs in FY 1989 and FY 1990.

- A total of 76,410 single parent/homemaker students were identified as enrolled in technical/vocational programs during FY 1989 and FY 1990.

- There were 65,888 students enrolled in nontraditional programs (sex equity). These students received special counseling and guidance to enable them to complete their educational goals.

- To expand and improve efforts to provide services for these special populations, the Coordinating Board funded three projects to identify and assess programs in place to serve special populations and utilize Carl D. Perkins and JTPA funding.

- The Coordinating Board funded two projects to identify ways to retain at-risk students in technical/ vocational programs.

- One model program funded by the Coordinating Board tested and counseled students with limited English proficiency (LEP) to direct the students to appropriate technical/vocational training programs.

- The Coordinating Board provided funds for three projects to study special population groups in order to provide appropriate curriculum and support services, which are essential for retaining these students.

- One project developed and disseminated a manual on needs assessment, alternative models, budgeting and funding, program evaluation, program operations, and liability issues for on-site child care facilities at higher education institutions.

- The Coordinating Board provided funding for two projects to address the special needs of dislocated workers and to conduct workshops for technical/ vocational faculty in working with unemployed adults.

- One project conducted a study to assess employer attitudes on the hiring of released prisoners. The results of the study were disseminated to assist higher education institutes in designing programs to prepare released prisoners for the Texas work force.

- Funds were provided for a research project to survey existing statewide resources for minority students in technical/vocational programs to identify the perceptions of Hispanic and Black students about factors which impede or promote their success.

- The purpose of another project was to review the funding incentive formula for federal and state legislation for technical/vocational education and job training and to develop bonus incentives for serving special populations.

GOAL 4: FACULTY AND STAFF NEEDS— Improve the quality of instruction, counseling, management and leadership.

Strategy 4-A: Instructional Support
Develop innovative instructional processes to promote improvement of technical and vocational instruction.

- Several projects funded by the Coordinating Board promoted improved technical/vocational instruction:
  - Two projects centered on developing and using video as a teaching instrument. Funding was provided for another project to present video workshops on curriculum design.
  - One project introduced newly hired, part-time technical/vocational instructors to the teaching environment at community colleges and technical institutes through a specialized training program.
  - Another project developed a model program for open entry/open exit training in basic machine tool operations, primarily for disadvantaged students and displaced workers.

Strategy 4-B: Telecommunications Network Applications
Produce programs for faculty development and student laboratory instruction to increase accessibility to high technology equipment and facilities and to reduce costs of training.

- STARLINK is the telecommunications network which received pilot funding from the Coordinating Board in FY 1990 to serve public community colleges and technical institutes in Texas. During that year, four STARLINK teleconferences were produced:

  (a) orientation to teleconferencing;
  (b) "2 + 2" articulation;
  (c) technical/vocational education marketing; and
  (d) basic skills in vocational curriculum.

  Plans for the future teleconferences include:

  (a) Clinical Evaluation of Health Occupations Students;
  (b) Professional Development for Adjunct Faculty;
  (c) Contract Education;
  (d) Superconducting Supercollider Technology, Part I;
  (e) Computer Assisted Drafting (CAD) Technology Update;
  (f) Minority Opportunities in Vocational Education;
  (g) Counseling in Technical-Vocational Education;
  (h) Automotive Inservice Training; and
  (i) Superconducting Supercollider Technology, Part II.

Strategy 4-C: Faculty Development
Encourage technical and vocational education faculty to continue their academic studies, to enhance their teaching skills, and to remain current in their knowledge and application of their technical skills.

- The Coordinating Board funded more than 30 projects designed to help technical/vocational education faculty enhance their teaching skills and to remain current in the application of their technical knowledge and competencies. Most of these projects identified trends within an industry and developed innovative teaching techniques. Many projects included inservice training to disseminate the findings. Examples of the program areas or subject matter include:

  (a) incorporating computer configuration and construction in the curriculum;
  (b) identifying innovative ways to teach a physiology lab on cardiovascular functions;
  (c) implementing multiuser operating systems;
  (d) teaching innovative agricultural approaches; and
  (e) teaching computer-assisted English language instruction.

- A second-year project presented regional workshops for automotive instructors in computer command control and electronic engine control.

- One project identified and developed faculty teams and service delivery methods to provide professional development of faculty by using cluster knowledge and competency statements derived from a needs assessment.

- To address the emerging technology of certain industries, one project assessed the need for an educational program on handling hazardous materials in Texas.

Strategy 4-D: Counselor Development
Develop training opportunities to improve the knowledge and skills of counselors so that they can encourage technical and vocational students to pursue higher levels of education and to understand the need for lifelong learning and skills upgrading.

- The Coordinating Board facilitated an annual three-day workshop for Perkins special population service providers at public community colleges and technical institutes, most of whom serve as counselors.

- The Coordinating Board distributed to each public community college and technical institute a revised Technical Assistance Guide (TAG) in FY 1989. The TAG provides detailed directions and examples for spending Carl D. Perkins money on technical/vocational students, with a special emphasis on services for special populations.

Strategy 4-E: Leadership and Management Training
Develop a variety of training opportunities to increase the leadership and management skills of technical and vocational education administrators and faculty.

- The Coordinating Board implemented a rule requiring that each public community/junior college have a trustee training policy.

- A two-year minority leadership development project worked to identify leadership skills and strategies for skill development, and classified methods to encourage minority faculty and staff to work and advance within community colleges and technical institutes.

GOAL 5: COMMUNITY NEEDS—
Provide support services to Texas communities to help them remain viable and competitive in the international economy of the 21st century.

Strategy 5-A: Private-Public Contracting
Encourage contractual arrangements for education, training and other service among higher education institutions, public agencies and private sector entities (nonprofit and for-profit).

- To encourage contractual arrangements for education and training, the Coordinating Board funded a project to expand an existing Technical Assistance Center to develop and deliver workshops for local business people, as well as to coordinate efforts to educate business people about international trade.
- The Coordinating Board established rule changes on contract instruction to facilitate contracting between institutions and business/industry.

Strategy 5-B: Community Leadership
Encourage and facilitate resource sharing among private sector and public higher education institutions to stimulate job creation and retention.

- To encourage and facilitate resource sharing, the Coordinating Board assisted the Higher Education Regional Councils finalize out-of-district course approvals and institutional plans.
- The Coordinating Board provided co-funding for six regional and quality work force planning committees to coordinate regional resources and to institute labor market information systems.

Strategy 5-C: Institutional Flexibility and Innovation
Provide leadership to develop new, creative and effective ways to respond to rapidly changing economic issues.

- To foster community and regional dialogues about economic development needs, the Coordinating Board funded two projects to study and develop economic development activities among local businesses, higher education institutions, and surrounding areas.
- The Coordinating Board provided funding for a project to design, develop, and disseminate a flexible model for needs assessment in technical/vocational institutions in Texas.
- A continuation project was funded to test criterion-referenced measures and other data elements incorporated into a validity and reliability model for program vitality.

Strategy 5-D: Small Business Support
Provide services for small business development and expansion.

- The Coordinating Board participated with the Texas Department of Commerce in the development of guidelines for the new Workforce Development Industrial Start-Up Incentive Program for new expanding industries to support economic development.
- The Coordinating Board funded four projects to help institutions provide services for small business development and expansion. Some of the services/purposes are listed below:

  (a) to provide training information;
  (b) to enable entities to access information services;
  (c) to develop a model comprehensive economic database;
  (d) to provide access to capital; and
  (e) to survey young businesses to identify educational needs.

- A project was funded to work with 30 self-employed entrepreneurs so that they could be (1) assisted financially in their first business venture; and (2) supported by professionals during their start-up to make their businesses successful.

GOAL 6: ADEQUATE RESOURCES— Increase funding and support for technical and vocational education and training in Texas.

Strategy 6-A: Public Funding Mechanisms
Analyze public funding sources and revenue allocation processes to develop appropriate and equitable mechanisms to increase resources for technical and vocational education.

- During FY 1989 and FY 1990, the Coordinating Board allocated and administered Carl D. Perkins federal funds for technical/vocational education through a formula and application process.
- Federal funds were provided to postsecondary institutions for program start-up, program improvement or expansion, training and retraining of adults, and serving special populations.
- Each institution submitted an application which detailed the institutional plan for expending allocated Perkins funds. The Coordinating Board verified each plan for allowable activities and developed a centralized receipt and distribution system for processing institutions' requests for Perkins expenditures and activities. This system is continually reviewed to ensure that Coordinating Board staff can provide timely technical assistance to the institutions.
- A portion of these federal discretionary funds were distributed to postsecondary institutions on a Request for Proposal (RFP). These RFP's were awarded through a competitive process composed of peer review and evaluation. The Coordinating Board increased the use of peer readers to ensure an objective review by use of the grant readers and to provide an opportunity for more involvement in the process.
- The Coordinating Board provided a workshop on Perkins' funds at the bi-annual meeting of the Texas Association of Postsecondary Occupational Education Administrators. Attendees were primarily persons from each campus who were responsible for managing their institution's Carl D. Perkins funds.

Strategy 6-B: Private Resources
Explore additional mechanisms to encourage new and expanded contributions from the private sector for technical and vocational education.

- The Coordinating Board funded a grantsmanship training project to develop and conduct a series of two-day workshops on funding sources, proposal development, and management of externally-funded projects. The project included development of a resource materials notebook.
- A project to train service providers for women's programs was funded. The purpose of the project was to develop a curriculum to train those who work with displaced homemakers and other disadvantaged women in skills for financial planning and fund raising to support the training and service projects of their organizations.

Strategy 6-C: Coordination of Resources
Develop planning processes to coordinate public and private funding sources to promote an effective, cost-efficient service delivery system.

- Funding was provided by the Coordinating Board for a project to present seven regional workshops for staff at public community colleges and technical institutes to provide training in planning, obtaining and sharing resources, and implementing coordinated technical/vocational programs.

EVALUATION OF POSTSECONDARY VOCATIONAL EDUCATION PROGRAMS

The program evaluation process developed for the technical/vocational programs of Texas' public community colleges and technical institutes has a two-fold purpose: compliance with federal/state requirements and providing information for program and institutional planning. Consistent with these purposes, the Coordinating Board views the evaluation process as a means of cooperatively assessing the present status of a program and as a first step towards program improvement.

SITE-VISIT EVALUATIONS

In addition to federal and state policy guidelines compliance, the primary focus of the technical/vocational program evaluation is on improving the effectiveness of programs and the educational experiences of students. External evaluations are particularly important because they use data and human resources which are beyond any one institution's investment capability. Institutional data, student performance measurements, and the professional expertise of evaluation team members are important resources for improving planning at the institutional level.

The current evaluation system was developed in 1987. The evaluation instrument was pilot tested that year, and an evaluation training guide was developed. During the 1987-88 academic year, the first year of implementation, 17 institutions were evaluated. The Coordinating Board conducted evaluation visits at 8 institutions in 1988-89 and 11 institutions in 1989-90.

The evaluation process uses a site-visit approach. The evaluation team is headed by a Coordinating Board staff member and consists of a minimum of four individuals recruited from institutions in Texas comparable to the one being evaluated.

The evaluation process includes the assignment of an institutional site coordinator to oversee the evaluation site visit with a committee appointed to plan the institution's response to the visit. The questions addressed at the site visit are in the evaluation instrument. This instrument is completed by the evaluation team during these site visits. It also provides institutional self-evaluation.

The program status section was added to the evaluation instrument in October 1989 to align the process to the newly revised Technical and Vocational Program Guidelines. Based on program observation and findings, the process determines one of the following recommendations:

Continuation—program is successful in meeting its goals.

Continuation with Revision—program needs improvement in one or more areas.

Deactivation—new student enrollment is suspended. A program may remain deactivated no longer than three years. At the end of this period the institution must either reactivate or close the program.

Sunset Review—requires a second, more extensive evaluation.

A major portion of the programs that were evaluated during the site visits were recommended *Continuation* or *Continuation with Revision*. *Deactivation* was recommended for 7 programs and *Sunset Review* was recommended for 22 programs.

SUNSET REVIEW

A program may be closed if the evaluation and sunset review process determines that it is no longer viable and should no longer receive state funding. Closure may be effected by either the local institution or by Coordinating Board action.

1. *Institutional Initiated Closure*—A program may be closed voluntarily by an institution by notifying the Coordinating Board as specified in the Technical and Vocational Program Guidelines.

2. *Coordinating Board Initiated Closure*—Every program receiving state funding will be evaluated periodically according to procedures established by the Coordinating Board. The Coordinating Board staff use the results of these evaluations to identify programs subject to sunset review.

ON-SITE COMPLIANCE MONITORING

Monitoring is done to assure compliance with federal guidelines and state policy; to assure that the services, programs and activities provided to public higher education technical/vocational students are consistent with the plan submitted and approved by the Coordinating Board; and to provide technical assistance to the institution on documentation, tracking and reporting requirements.

A monitoring instrument was developed through a review of federal and state rules and regulations to determine items for which compliance was either required or desirable. Review of the instrument was provided by the Federal Projects Advisory Committee (FPAC) and by institutions.

The Coordinating Board conducted site monitoring visits at 16 institutions for the two-year period. After each monitoring visit, the institution received a written final report outlining items of non-compliance, areas needing improvement, and commendations. Items of non-compliance required corrective action by the institutions and a written plan for compliance acceptable to the Coordinating Board. Follow-up visits by Coordinating Board staff assured compliance.

CIVIL RIGHTS EVALUATION

In addition to conducting evaluations through on-site compliance monitoring visits, the Coordinating Board and the Texas Education Agency developed and implemented methods to carry out the State's civil rights obligation. These evaluative activities and procedures were developed under the U.S. Department of Education Office of Civil Rights guidelines for eliminating discrimination on the basis of race, color, national origin, sex, or handicap in vocational education in public secondary schools and postsecondary institutions. The methods of administration and related procedures included:

1. An internal review (desk audit) of pertinent data submitted annually to the Coordinating Board by all public community colleges and technical institutes.

2. An on-site review to verify that:

   a. policies, procedures, and practices relating to technical/vocational education comply with civil rights requirements in technical/vocational education;

   b. students who desire to participate in technical/vocational education were not denied access to technical/vocational education because of race, color, national origin sex, or handicap; and

   c. equal provisions, equal opportunity, and equal treatment were provided to all students wanting to participate in technical/vocational education.

3. The use of technical assistance as a means to prevent civil rights violations.

Technical assistance was provided in a variety of ways, including: advice on particular questions, dissemination of written materials, assistance with the revision of recruitment and promotional materials, and technical advice on eliminating architectural and equipment barriers that prevent handicapped students from participating in vocational education.

The Coordinating Board conducted 35 evaluation visits at institutions during the two-year period. The most frequent citations in civil rights areas were: (1) a notice of nondiscrimination on the basis of race, color, national origin, sex, or handicap was not included in recruitment information, admissions criteria, student handbook, catalogs, or other publications for its students and employees; (2) technical/vocational programs were not readily accessible to mobility-impaired students; (3) the required public notice to students, parents, employees, and the general public had not been made; and (4) grievance procedures for students had not been established to address discrimination based on race, color, national origin, sex, handicap, or limited English proficiency.

PROGRAM COMPLETER/EMPLOYER ASSESSMENT

Follow-up data are provided to the Coordinating Board by public community colleges and technical institutes to assess the relative success of technical/vocational programs. The data provided in Table II-5 are representative of students responding to surveys who completed or otherwise exited programs during the 1988-89 school year and were subsequently surveyed during the 1989-90 school year. Follow-up data for students completing during the 1989-90 school year will not be available until 1991.

Analysis of the data in Table II-5, while yielding important information, is not sufficient for Coordinating Board assessment of program success. The primary limitation is the large number—59.8 percent—of students who did not respond to the survey.

The Coordinating Board addressed this problem by providing funds for research and development projects at the institutional level, one of which focused on the ability of community colleges to match records of their former students with Texas Employment Commission (TEC) unemployment insurance wage records. At the state level, the Coordinating Board provided funding for a continuation project by the State Occupational Information Coordinating Committee (SOICC) to sponsor a statewide study to match secondary and higher education student records with the TEC database, as well as to explore appropriate roles for state agencies in such a research process.

Review of the data provided by businesses who employ program completers assess the employers' satisfaction with five specific elements of the program. The evaluation provided by the employers used a scale of "1" (lowest evaluation score) to "5" (highest evaluation score) to rate the program completers performance. Table II-6 indicates Technical Knowledge was rated at 4.06, Work Attitudes at 4.39, Work Quality at 4.24, Overall Rating at 4.21, and Relative Preparation at 3.99.

TABLE II-1

Postsecondary Institution Vocational Enrollments By Sex, Race, and Special Needs Category Program Years 1989 and 1990

Level of Instruction	Approved Degree and Certificate Programs		Short-term Adult and Apprenticeship Programs	
	1989	1990	1989	1990
TOTAL ENROLLMENT	254,291 (100.0%)	233,335 (100.0%)	156,034 (100.0%)	134,077 (100.0%)
ENROLLMENTS				
SEX				
Male	119,459 (47.0%)	107,302 (45.9%)	75,928 (48.7%)	61,057 (46.0%)
Female	134,832 (53.0%)	126,033 (54.1%)	80,106 (51.3%)	73,020 (54.0%)
RACE/ETHNICITY				
American Ind./Alaskan Nat.	966 (0.4%)	872 (0.4%)	795 (0.5%)	613 (0.4%)
Asian/Pacific Islander	6,031 (2.4%)	5,920 (2.5%)	3,491 (2.2%)	2,111 (1.6%)
Black, Not Hispanic	29,804 (11.7%)	26,059 (11.2%)	17,563 (11.3%)	12,903 (9.6%)
Hispanic	53,951 (21.2%)	50,400 (21.6%)	19,444 (12.5%)	19,274 (14.4%)
White, Not Hispanic	163,539 (64.3%)	150,084 (64.3%)	114,741 (73.5%)	99,176 (74.0%)
SPECIAL NEEDS CATEGORY				
Handicapped	11,069 (4.4%)	10,373 (4.4%)	2,498 (1.6%)	2,182 (1.6%)
Disadvantaged*	92,866 (36.5%)	93,089 (39.9%)	21,422 (13.7%)	17,304 (12.9%)
Limited English Proficient	14,100 (5.5%)	18,165 (7.8%)	5,543 (3.6%)	5,211 (3.9%)
Single Parent/Homemaker	24,169 (9.5%)	30,083 (12.9%)	11,774 (7.5%)	10,384 (7.7%)
Sex Bias/Stereotyping	19,999 (7.9%)	20,962 (9.0%)	15,623 (10.0%)	9,304 (7.0%)

*This category includes academically and economically disadvantaged students.

TABLE II-2

Approved Postsecondary Programs
1989-90

Program Area	No. of Programs	Percent of Total
Agriculture	93	2.7
Homemaking	166	4.9
Distribution and Marketing	382	11.2
Office Occupations	777	22.8
Industrial Education	1,098	32.3
Health Occupations	409	12.1
Technical Education	441	13.0
Related	35	1.0
Totals	3,401	100.0

The statewide Education and Training Clearinghouse was established in FY 1990 to maintain verified inventories of available technical/vocational training programs at postsecondary institutions.

TABLE II-3

Contact Hours for Technical-Vocational Programs
1988-89 and 1989-90

Program Area	1988-89	1989-90	Increase (Decrease)
Agriculture	912,675	803,985	(108,690)
Homemaking	1,528,423	1,410,737	(117,686)
Distribution and Marketing	2,861,924	2,667,131	(194,793)
Office Occupations	18,295,866	18,370,802	74,936
Industrial Education	16,384,433	15,422,503	(961,930)
Health Occupations	12,833,847	13,692,754	858,907
Technical Education	7,663,047	7,395,896	(267,151)
Related	2,538,620	2,023,050	(515,570)
Adult Apprenticeship	660,313	611,478	(48,835)
Adult (Supplemental/Prep)	5,279,964	5,051,955	(228,009)
Cooperative Work Experience	3,993,192	3,603,032	(390,160)
Totals	72,952,304	71,053,323	(1,898,981)

TABLE II-4

State and Federal Funds for Postsecondary Vocational Education

	Expended 1987-88	Expended 1988-89	Expended 1989-90
State General Revenue	$228,725,136	$228,725,136	$247,876,147
Federal Vocational Funds	19,039,937	26,187,700	26,586,248
Total Postsecondary	$247,765,073	$254,912,836	$274,462,395

TABLE II-5

Status of 1988-89 Postsecondary Vocational Program Completers Responding by Major Program Area[1]

		Successful Student Outcomes							
		Employed							
Program Area[2]	Number Surveyed (% Respnd.)[3]	Field Related to Training	Field not Related to Training	Military	Total	Pursuing Additional Education	Total	Unemployed	Not in Labor Force
Agriculture	316 (33.2)	42.9%	9.5%	0.0%	52.4%	33.3%	85.7%	7.6%	6.7%
Homemaking	667 (38.4)	64.5%	9.7%	0.4%	74.6%	14.4%	89.0%	5.9%	5.1%
Distribution and Marketing	1,272 (36.6)	55.8%	17.4%	3.0%	76.2%	15.0%	91.2%	6.0%	2.8%
Office Occupations	4,337 (48.0)	50.7%	15.2%	0.4%	66.3%	19.7%	86.0%	9.1%	4.9%
Industrial Education	5,864 (36.2)	59.6%	13.9%	0.8%	74.3%	11.9%	86.2%	9.6%	4.2%
Health Occupations	6,281 (41.3)	82.0%	3.7%	0.5%	86.2%	7.4%	93.6%	3.3%	3.1%
Technical Education	4,576 (36.4)	60.6%	14.7%	0.9%	76.2%	13.0%	89.2%	7.8%	3.0%
Related	469 (57.4)	56.1%	8.9%	2.6%	67.6%	26.8%	94.4%	2.6%	3.0%
All Programs	23,782 (40.2)	63.6%	11.4%	0.8%	75.8%	13.4%	89.2%	7.0%	3.8%

[1] Follow-up survey data reported are for students who completed a vocational program and graduated during the 1988-89 school year. Data were collected from completers during the 1989-90 school year. A completer is defined as a student who completed a degree or certificate program in vocational education or who have completed a planned sequence of courses designed to meet a vocational occupational objective.

[2] Data presented are organized by classification of instructional program (CIP) major program areas.

[3] Successful Student Outcomes are based on the percentage of completers who responded to the survey. The extent that the findings can be generalized to the total population may be limited due to the low number of respondents.

TABLE II-6

Employer Ratings of 1988-89 Postsecondary Vocational Program Completers Employed Full-Time In A Field Related To Training*

Program Area**	Surveys Mailed	% Surveys Received	Technical Knowledge	Work Attitude	Work Quality	Overall Rating	Relative Preparation
Agriculture	52	38.46%	3.97	4.25	3.95	3.90	3.80
Homemaking	90	53.33%	3.73	4.51	4.47	4.47	3.98
Distribution and Marketing	192	60.94%	4.00	4.47	4.34	4.27	4.25
Office Occupations	778	57.58%	4.17	4.53	4.34	4.31	4.17
Industrial Education	1,021	47.50%	3.89	4.28	4.13	4.05	3.85
Health Occupations	1,578	61.47%	4.08	4.33	4.22	4.20	3.82
Technical Education	800	54.62%	4.14	4.51	4.25	4.24	4.31
Related	94	62.77%	4.06	4.20	4.23	4.30	3.77
All Programs	4,605	56.11%	4.06	4.39	4.24	4.21	3.99

*Employer follow-up data were collected during the 1989-90 school year from employers of students who completed a vocational program, graduated during the 1988-89 school year, and were employed in a field related to training. Employers evaluated a completer's performance in five work-related areas by using a scale with possible scores from "1" (lowest evaluation score) to "5" (highest evaluation score).

**Data presented are organized by classification of instructional program (CIP) major program areas.

SECTION III
ACHIEVING AN INTEGRATED DELIVERY SYSTEM THROUGH REGIONAL PLANNING

BACKGROUND

In 1987, two key reports provided the basis for a statewide initiative in regional planning for a quality work force. The original *Master Plan for Vocational Education*, which was developed in response to the educational reforms brought about by H.B. 72, called for pilot projects to explore the feasibility of regional planning for vocational-technical education. The Report of the Select Committee for Higher Education emphasized that vocational-technical education must be responsive to rapidly changing job markets, adaptable to new training technologies, and flexible for individual student needs. For this reason, the Select Committee recommended partnerships with business for effective local and regional planning.

In 1988, the Governor's Task Force on Vocational Education recommended that Texas develop an integrated vocational-technical education delivery system beginning with the implementation of effective regional planning to establish priorities for vocational-technical education. The Strategic Economic Policy Commission also addressed this issue in their 1989 report to the 71st Texas Legislature. Among the five strategic objectives listed was a call for a skilled, competitive work force in Texas as the key to future economic growth and diversification.

LEGISLATIVE ACTION

In response, the 71st Texas Legislature passed a bill in 1989 that requires regional planning for vocational-technical education and training. The Texas Education Code, Chapter 21, was amended by adding Section 21.115, which ensures that:

- There will be 24 Quality Work Force Planning Regions that have the same boundaries as the current state planning regions delineated by the governor (see map in Appendix A).
- The membership of Quality Work Force Planning Committees must be established.
- Priorities for vocational-technical education and training programs must be established for each region.
- Regional service delivery plans must be developed.

TRI-AGENCY PARTNERSHIP

In 1987, the Texas Education Agency, the Coordinating Board, and the Department of Commerce formed a unique tri-agency partnership to assist regions to initiate Quality Work Force Planning. Working together, these agencies responded to this new legislation by updating in November 1989 the *Master Plan for Vocational and Technical Education*, focusing on achieving an integrated education and training delivery system through regional planning for a quality work force. The Department of Commerce added this initiative to its overall Agency Strategic Plan as a critical step to meeting Texas' work force requirements in the future.

PILOT PROJECTS

The three state agencies are using federal funds available under the Job Training Partnership Act and the Carl D. Perkins Vocational Education Act to sponsor pilot projects in nine regions to develop and test a flexible Quality Work Force Planning model for statewide use (see map in Appendix A for locations). Three projects began in January 1988:

- the Alamo region project administered by the Region XX Education Service Center in San Antonio;
- the North East Texas region project administered by Northeast Texas Community College in Mt. Pleasant; and
- the Upper Rio Grande region project administered by the Upper Rio Grande Private Industry Council in El Paso.

In November 1988, three additional projects were started:

- the Heart of Texas region project administered by McLennan Community College in Waco;
- the North Central Texas region project administered by the Dallas County Community College District in partnership with InterLink, Inc. in Dallas; and
- the Panhandle region project administered by Amarillo College.

The most recent projects were initiated in September 1989:

- the Capital region project administered by Austin Community College and the Rural Capital Area Private Industry Council in Round Rock;
- the East Texas region project administered by the University of Texas at Tyler; and
- the South Plains region project administered by the South Plains Community Action Association in Levelland.

Each pilot project successfully achieved the following major objectives in that they:

- established Quality Work Force Planning Committees with representation from business, industry, and education and training institutions;
- developed a four-step planning model (see Appendix B), which provided the basis for rules on the statewide implementation of Quality Work Force Planning that were adopted by the tri-agency partnership in 1990;
- implemented a regional labor market information system using a software program from the State Occupational Information Coordinating Committee, which was developed with funding from the Texas Department of Commerce;
- identified key regional industries with the greatest potential for future employment;
- developed a regional list of targeted occupations for education and training based upon regional industrial analysis;
- compiled regional inventories of education and training programs and economic development organizations for use in the planning process; and
- developed a regional service delivery plan based upon targeted occupations and related programs, services, and activities.

The nine projects are receiving a final year of federal discretionary funds through June 30, 1991, ranging from $50,000 - $75,000 per region.

SUCCESSFUL OUTCOMES

When fully implemented in a region, the planning model is successful only if specific program-related outcomes can be demonstrated. Five pilot projects (Alamo, North Central, North East, Heart of Texas, and Upper Rio Grande regions) have implemented service delivery plans that have impacted program decisions in their respective regions. The remaining four pilot projects (Capital, East Texas, Panhandle, and South Plains regions) have developed plans with implementation scheduled for the 1990-91 year. The first five regions reported numerous examples of program-related decisions impacted by Quality Work Force Planning:

- 2 + 2 programs (curriculum linkages between high schools, colleges, and technical institutes) between El Paso-area school districts, El Paso Community College, and Western Technical Institute in the fields of:
  - medical technology;
  - drafting/design technology; and
  - micro-computer technology.
- 2 + 2 program between Northeast Texas Community College and seven rural school districts in the field of office occupations;
- 51 program articulation agreements between three San Antonio community colleges and 17 school districts in program areas related to computer technologies;
- agreements between all school districts in the Heart of Texas region and the Texas State Technical Institute (TSTI) in Waco to allow high school students to receive concurrent high school and college course credit for courses taught on the TSTI campus. Students will have access to as many as 41 vocational-technical education programs;
- articulation and resource sharing agreements in agricultural science between Alpine Independent School District and Sul Ross State University;
- new course in law enforcement training at Seguin Independent School District in response to increased demand for protective services;
- new Waco Independent School District requirement, in response to requests by regional employers, that all students complete course work involving the competencies addressed in Algebra I and Geometry before graduation;
- New Heart of Texas Council of Governments 18-week JTPA displaced workers retraining program in the field of manufacturing production;
- new health occupations courses at Boerne Independent School District and Comal Independent School District in response to labor market demand;
- new courses in microcomputer applications at Sulphur Springs Independent School District and Hallsville Independent School District;
- agreement between DeSoto Independent School District and Dallas County Community College District to implement a 2 + 2 program in the field of health occupations;
- new McLennan Community College off-campus computer programming, vocational nursing, and secretarial training courses in Hewitt and downtown Waco;
- initiation of adult literacy program coordination efforts between Texas State Technical Institute at Waco, McLennan Community College, Baylor University, Paul Quinn College, Waco Independent School District, the Central Texas Literacy Coalition, and the Heart of Texas Council of Governments;
- Implementation of three programs in Northeast Texas designed to meet the needs of at-risk youth:

- Positive Alternatives for Success—coordination of services by Northeast Texas Community College for students at five rural school districts;
- Communities in Schools/Northeast Texas—coordination of services for four rural school districts by the Texas Employment Commission and Northeast Texas Community College; and
- School of Success—alternative school for at-risk youth from 13 Bowie County school districts.

- start-up of new health occupations internship programs by Judson and Schertz-Cibolo-Universal City Independent School Districts; related resource sharing agreements to use the facilities at Village Oaks Hospital and to share teachers.
- marketing education program articulation agreement between Palo Alto College and Harlandale Independent School District;
- new health occupations courses at Pine Tree and Jefferson Independent School Districts;
- new computer assisted drafting course at Mineola Independent School District; and
- upgrading and expansion of TSTI-Waco's aviation maintenance technology program.

When implemented statewide, Quality Work Force Planning will produce these successful outcomes vital to Texas:

- significant numbers of highly skilled workers trained for jobs in demand in each region;
- prominent involvement by business/industry to determine priorities for vocational-technical education and training programs and related skills to be taught;
- increased efficiency and cost-effectiveness of matching and delivering training for jobs in demand;
- reduction in unnecessary program duplication; and
- improved educational support for economic development.

INDEPENDENT EVALUATION

The tri-agency partnership employed Decision Information Resources, Inc., of Houston, Texas to conduct an extensive independent evaluation of the activities conducted by the pilot projects. This private consulting firm conducted numerous on-site visits, personal interviews of Committee members and project staff, and in-depth telephone surveys with 293 individuals (both Committee members and individuals not serving on the Committees) from the pilot regions.

The findings documented that Quality Work Force Planning has had significant impacts in most of the pilot regions. Among the impacts are the following:

- increased knowledge among program providers and employers about future occupations and skills demanded in their regions and the status of related training options;
- increased capability to conduct labor market analysis and skills inventories and to develop program articulation agreements; and
- increased communication among educators, training providers, and employers to expedite the process of program planning, development, and evaluation. (Year 3 Final Evaluation Report, p. 55).

Telephone survey findings point to the overall positive impact of the planning process:

- Ninety-six percent of respondents believe that the planning projects have an important role to play as a source of data and information on occupational needs and related programs.

- Over 60 percent of the respondents indicated that the information and coordination received from the planning project had at least some impact on their institution's program decisions or future plans. Forty-two percent indicated that the planning project had a direct impact on programs, with more experienced regions having greater impacts than less experienced regions.
- Sixty-eight percent of the respondents stated that the projects had an impact on reducing overlap, competition, and unnecessary duplication among program providers, while 90 percent believe future planning efforts will be effective in this regard. (Year 3 Final Evaluation Report, pp. 55-56).

The evaluator concluded that Quality Work Force Planning will be successful in developing an educated and skilled work force in Texas when implemented statewide.

CURRENT STATUS

In accordance with the schedule of activities specified in the *Master Plan for Vocational and Technical Education*, tri-agency partnership staff conducted Quality Work Force Planning orientation meetings in the remaining 15 regions of the state during the spring and summer of 1990. Staff also provided technical assistance to work groups designated to form Committees in those regions. Full Committees will start operating in all regions during the fall of 1990.

Each agency will continue to provide support and technical assistance to the statewide effort. In addition, each agency will have a specific coordination role, with support from the other two agencies:

- Texas Education Agency staff will provide technical assistance in coordinating Committee functions and operations.
- Texas Higher Education Coordinating Board staff will provide technical assistance in developing program articulation agreements and 2+2+2 programs.
- Texas Department of Commerce staff will provide technical assistance in establishing and using regional labor market information systems.

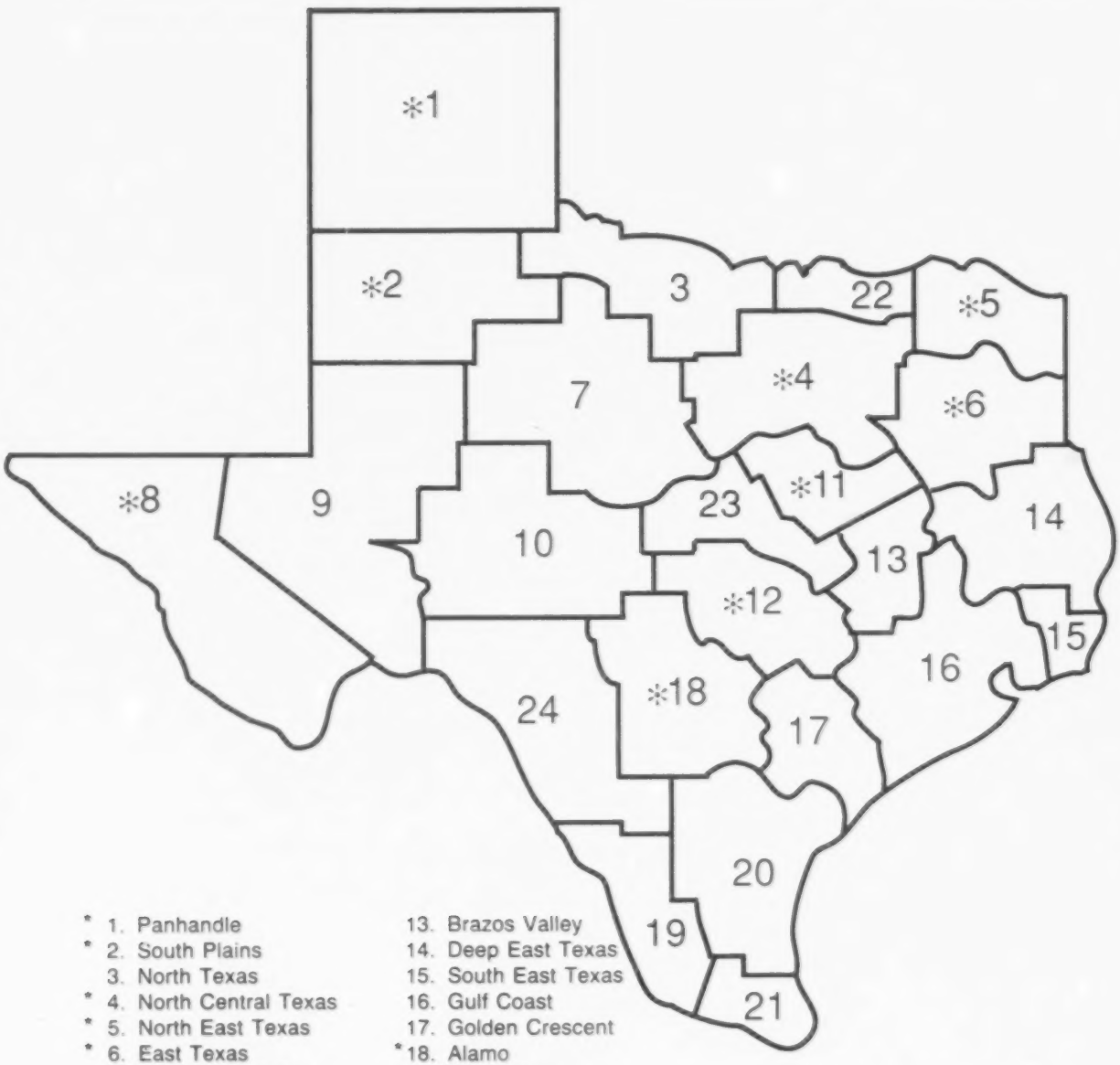
In addition, the tri-agency partnership developed a joint 1992-1993 legislative appropriations request to fund the activities conducted by 24 Quality Work Force Planning Committees and the technical assistance to be provided by the state agencies. In response to a recommendation by the pilot project evaluator based on project experience, a proposed annual budget of $90,000 per region will be requested from the 72nd Texas Legislature to provide staff services and to pay related operating costs for each Committee.

CONCLUSION

The Texas Legislature committed our state to the implementation of an integrated vocational-technical education and training delivery system from kindergarten through higher education to support the development of an educated and skilled work force. Business and industry are desperate for the skilled workers they need to stay internationally competitive. Both at the state and regional levels, a vocational-technical education and training system must be created that will be more responsive to the needs of employers and to trends in the labor market. Quality Work Force Planning is the crucial link in identifying employer needs, as well as local and regional vocational-technical educational and training resources, to help establish such an integrated delivery system. Quality Work Force Planning will ensure that students who complete vocational-technical education and training programs are prepared for employment with the skills required by employers in the 21st Century.

APPENDIX A
QUALITY WORK FORCE PLANNING REGIONS

Quality Work Force Planning Regions



* 1. Panhandle
* 2. South Plains
3. North Texas
* 4. North Central Texas
* 5. North East Texas
* 6. East Texas
7. West Central Texas
* 8. Upper Rio Grande
9. Permian Basin
10. Concho Valley
*11. Heart of Texas
*12. Capital
13. Brazos Valley
14. Deep East Texas
15. South East Texas
16. Gulf Coast
17. Golden Crescent
*18. Alamo
19. South Texas
20. Coastal Bend
21. Lower Rio Grande Valley
22. Texoma
23. Central Texas
24. Middle Rio Grande

*Pilot Projects

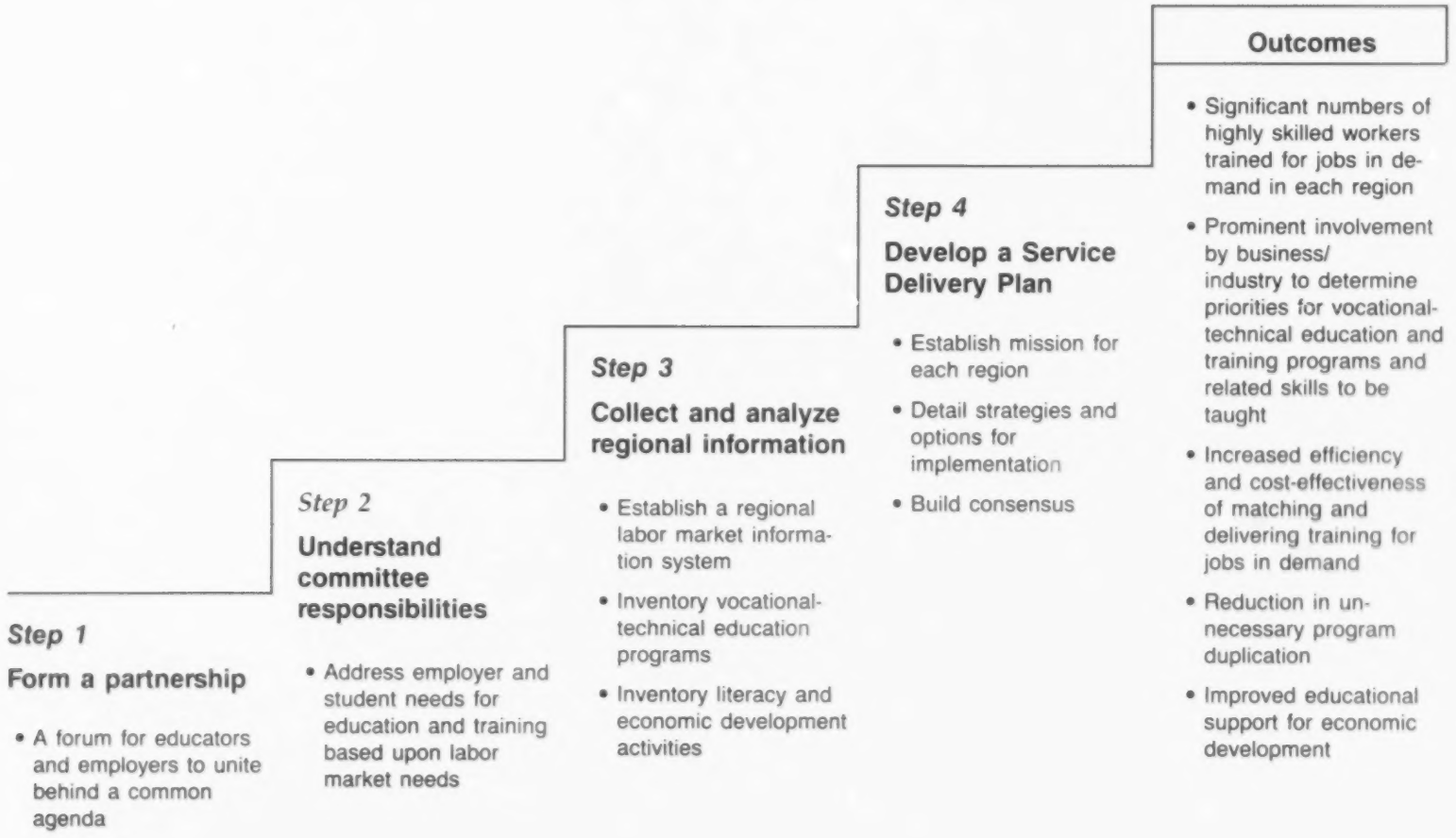
Texas Counties and Quality Work Force Planning Regions

County	Region Number	County	Region Number	County	Region Number	County	Region Number
Anderson	6	Eastland	7	Kerr	18	Rockwall	4
Andrews	9	Ector	9	Kimble	10	Runnels	7
Angelina	14	Edwards	24	King	2	Rusk	6
Aransas	20	Ellis	4	Kinney	24	Sabine	14
Archer	3	El Paso	8	Kleberg	20	San Augustine	14
Armstrong	1	Erath	4	Knox	7	San Jacinto	14
Atascosa	18	Falls	11	Lamar	5	San Patricio	20
Austin	16	Fannin	22	Lamb	2	San Saba	23
Bailey	2	Fayette	12	Lampasas	23	Schleicher	10
Bandera	18	Fisher	7	La Salle	24	Scurry	7
Bastrop	12	Floyd	2	Lavaca	17	Shackelford	7
Baylor	3	Foard	3	Lee	12	Shelby	14
Bee	20	Fort Bend	16	Leon	13	Sherman	1
Bell	23	Franklin	5	Liberty	16	Smith	6
Bexar	18	Freestone	11	Limestone	11	Somervell	4
Blanco	12	Frio	18	Lipscomb	1	Starr	19
Borden	9	Gaines	9	Live Oak	20	Stephens	7
Bosque	11	Galveston	16	Llano	12	Sterling	10
Bowie	5	Garza	2	Loving	9	Stonewall	7
Brazoria	16	Gillespie	18	Lubbock	2	Sutton	10
Brazos	13	Glasscock	9	Lynn	2	Swisher	1
Brewster	8	Goliad	17	McCulloch	10	Tarrant	4
Briscoe	1	Gonzales	17	McLennan	11	Taylor	7
Brooks	20	Gray	1	McMullen	20	Terrell	9
Brown	7	Grayson	22	Madison	13	Terry	2
Burleson	13	Gregg	6	Marion	6	Throckmorton	7
Burnet	12	Grimes	13	Martin	9	Titus	5
Caldwell	12	Guadalupe	18	Mason	10	Tom Green	10
Calhoun	17	Hale	2	Matagorda	16	Travis	12
Callahan	7	Hall	1	Maverick	24	Trinity	14
Cameron	21	Hamilton	23	Medina	18	Tyler	14
Camp	6	Hansford	1	Menard	10	Upshur	6
Carson	1	Hardeman	3	Midland	9	Upton	9
Cass	5	Hardin	15	Milam	23	Uvalde	24
Castro	1	Harris	16	Mills	23	Val Verde	24
Chambers	16	Harrison	6	Mitchell	7	Van Zandt	6
Cherokee	6	Hartley	1	Montague	3	Victoria	17
Childress	1	Haskell	7	Montgomery	16	Walker	16
Clay	3	Hays	12	Moore	1	Waller	16
Cochran	2	Hemphill	1	Morris	5	Ward	9
Coke	10	Henderson	6	Motley	2	Washington	13
Coleman	7	Hidalgo	21	Nacogdoches	14	Webb	19
Collin	4	Hill	11	Navarro	4	Wharton	16
Collingsworth	1	Hockley	2	Newton	14	Wheeler	1
Colorado	16	Hood	4	Nolan	7	Wichita	3
Comal	18	Hopkins	5	Nueces	20	Wilbarger	3
Comanche	7	Houston	14	Ochiltree	1	Willacy	21
Concho	10	Howard	9	Oldham	1	Williamson	12
Cooke	22	Hudspeth	8	Orange	15	Wilson	18
Coryell	23	Hunt	4	Palo Pinto	4	Winkler	9
Cottle	3	Hutchinson	1	Panola	6	Wise	4
Crane	9	Irion	10	Parker	4	Wood	6
Crockett	10	Jack	3	Parmer	1	Yoakum	2
Crosby	2	Jackson	17	Pecos	9	Young	3
Culberson	8	Jasper	14	Polk	14	Zapata	19
Dallam	1	Jeff Davis	8	Potter	1	Zavala	24
Dallas	4	Jefferson	15	Presidio	8		
Dawson	9	Jim Hogg	19	Rains	6		
Deaf Smith	1	Jim Wells	20	Randall	1		
Delta	5	Johnson	4	Reagan	10		
Denton	4	Jones	7	Real	24		
DeWitt	17	Karnes	18	Red River	5		
Dickens	2	Kaufman	4	Reeves	9		
Dimmit	24	Kendall	18	Refugio	20		
Donley	1	Kenedy	20	Roberts	1		
Duval	20	Kent	7	Robertson	13		

APPENDIX B

QUALITY WORK FORCE PLANNING MODEL FOR VOCATIONAL-TECHNICAL EDUCATION AND TRAINING IN TEXAS

Quality Work Force Planning Model for Vocational-Technical Education and Training in Texas


Step 1
Form a partnership
• A forum for educators and employers to unite behind a common agenda
Step 2
Understand committee responsibilities
• Address employer and student needs for education and training based upon labor market needs
Step 3
Collect and analyze regional information
• Establish a regional labor market information system
• Inventory vocational-technical education programs
• Inventory literacy and economic development activities
Step 4
Develop a Service Delivery Plan
• Establish mission for each region
• Detail strategies and options for implementation
• Build consensus
Outcomes
• Significant numbers of highly skilled workers trained for jobs in demand in each region
• Prominent involvement by business/ industry to determine priorities for vocational-technical education and training programs and related skills to be taught
• Increased efficiency and cost-effectiveness of matching and delivering training for jobs in demand
• Reduction in unnecessary program duplication
• Improved educational support for economic development

APPENDIX C
REFERENCES

REFERENCES

Decision Information Resources, Inc. *Regional Planning for a Quality Work Force: Evaluation of a Tri-agency Initiative by the Texas Education Agency, the Texas Higher Education Coordinating Board, and the Texas Department of Commerce*. Houston, Texas, July 31, 1990.

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COMPLIANCE STATEMENT

TITLE VI, CIVIL RIGHTS ACT OF 1964; THE MODIFIED COURT ORDER, CIVIL ACTION 5281, FEDERAL DISTRICT COURT, EASTERN DISTRICT OF TEXAS, TYLER DIVISION

Reviews of local education agencies pertaining to compliance with Title VI Civil Rights Act of 1964 and with specific requirements of the Modified Court Order, Civil Action No. 5281, Federal District Court, Eastern District of Texas, Tyler Division are conducted periodically by staff representatives of the Texas Education Agency. These reviews cover at least the following policies and practices:

(1) acceptance policies on student transfers from other school districts;

(2) operation of school bus routes or runs on a non-segregated basis;

(3) nondiscrimination in extracurricular activities and the use of school facilities;

(4) nondiscriminatory practices in the hiring, assigning, promoting, paying, demoting, reassigning, or dismissing of faculty and staff members who work with children;

(5) enrollment and assignment of students without discrimination on the basis of race, color, or national origin;

(6) nondiscriminatory practices relating to the use of a student's first language; and

(7) evidence of published procedures for hearing complaints and grievances.

In addition to conducting reviews, the Texas Education Agency staff representatives check complaints of discrimination made by a citizen or citizens residing in a school district where it is alleged discriminatory practices have occurred or are occurring.

Where a violation of Title VI of the Civil Rights Act is found, the findings are reported to the Office for Civil Rights, U.S. Department of Education.

If there is a direct violation of the Court Order in Civil Action No. 5281 that cannot be cleared through negotiation, the sanctions required by the Court Order are applied.

TITLE VII, CIVIL RIGHTS ACT OF 1964; EXECUTIVE ORDERS 11246 AND 11375; TITLE IX, 1973 EDUCATION AMENDMENTS; REHABILITATION ACT OF 1973 AS AMENDED; 1974 AMENDMENTS TO THE WAGE-HOUR LAW EXPANDING THE AGE DISCRIMINATION IN EMPLOYMENT ACT OF 1967; AND VIETNAM ERA VETERANS READJUSTMENT ASSISTANCE ACT OF 1972 AS AMENDED IN 1974.

It is the policy of the Texas Education Agency to comply fully with the nondiscrimination provisions of all federal and state laws and regulations by assuring that no person shall be excluded from consideration for recruitment, selection, appointment, training, promotion, retention, or any other personnel action, or be denied any benefits or participation in any programs or activities which it operates on the grounds of race, religion, color, national origin, sex, handicap, age, or veteran status (except where age, sex, or handicap constitute a bona fide occupational qualification necessary to proper and efficient administration). The Texas Education Agency makes positive efforts to employ and advance in employment all protected groups.

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